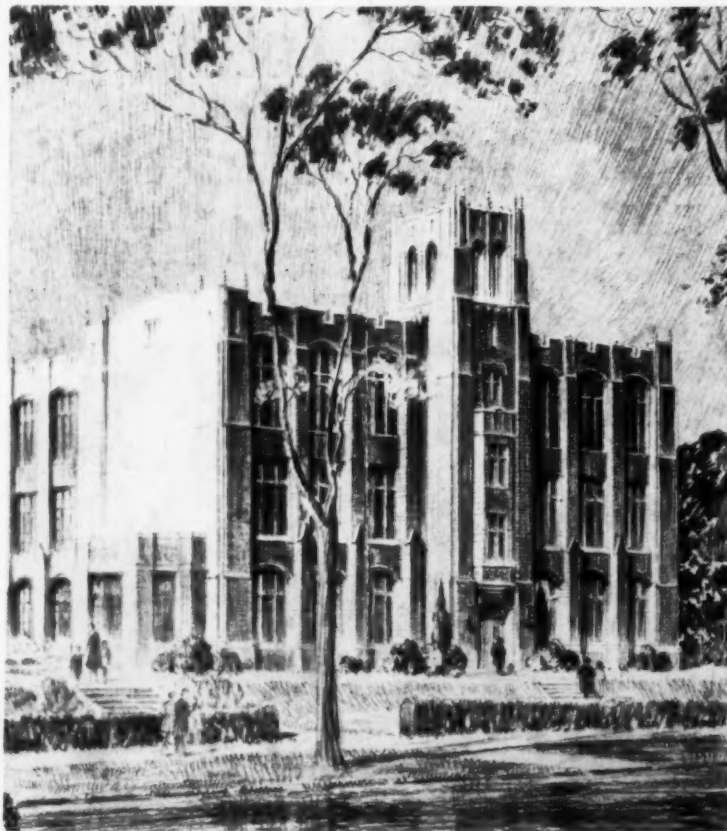


The NATION'S SCHOOLS

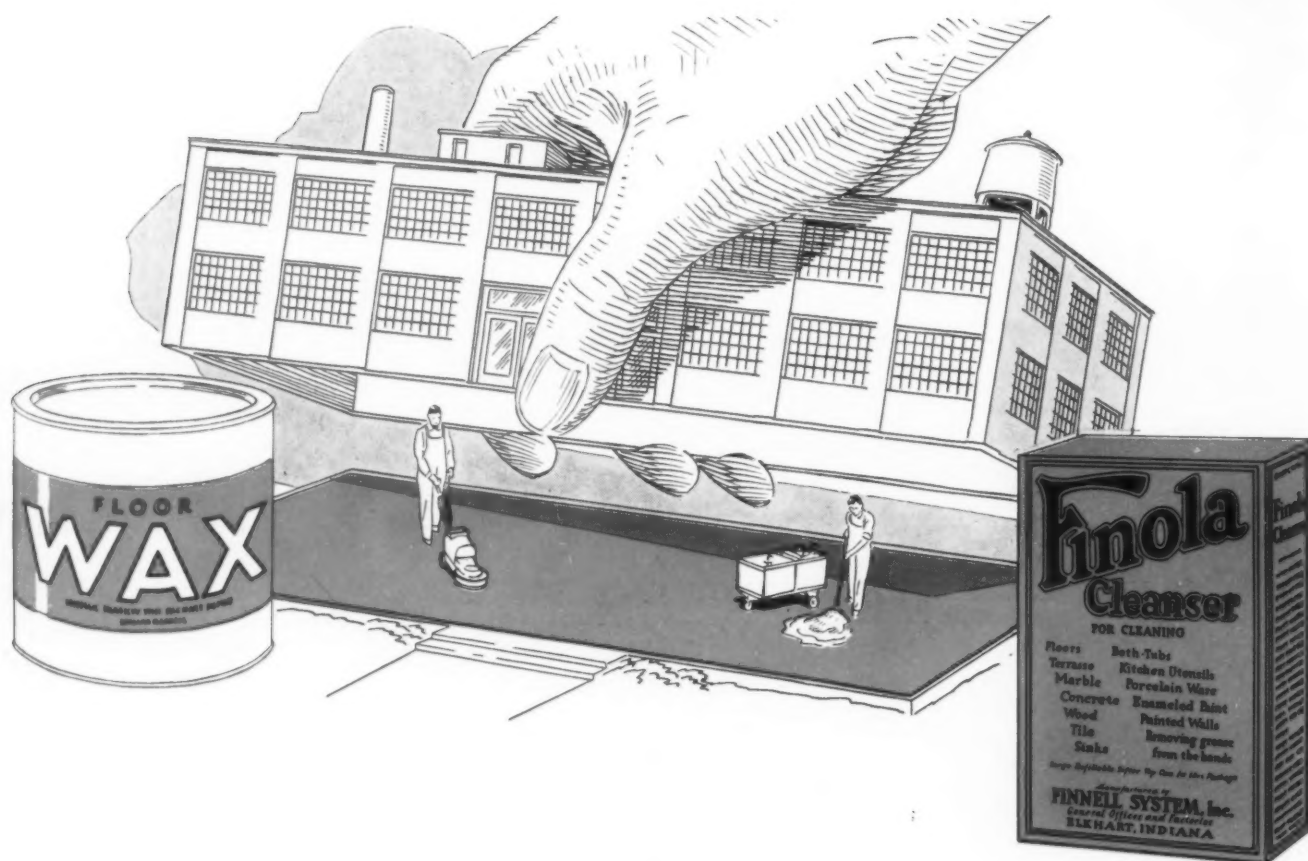
DEVOTED TO THE APPLICATION OF
RESEARCH TO THE BUILDING, EQUIPMENT
AND ADMINISTRATION OF SCHOOLS

VOL. V
No. 6

JUNE
1930



Published by THE NATION'S SCHOOLS PUBLISHING Co., Chicago.



Give Your FLOORS a REAL Cleaning and Polishing this Summer

DURING July and August, when pupils are on vacation, is your opportunity to clean the schools. It's time again, figuratively, to "raise the roof" and give the floors a thorough going over. Without obstruction by the thousands of feet that run and tramp over them during the school year, it is a paradise for the caretakers. And they will think it paradise indeed if you provide for their assistance a FINNELL System.

With a FINNELL, caretakers can really get at the dirt that hand methods have inevitably allowed to accumulate. After that, the FINNELL used regularly will keep floors clean in a fraction of the time required by hand methods, an important factor in schools where there is so much cleaning to do, and so little time in which to do it.

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ELECTRIC FLOOR SCRUBBER-POLISHER



HOMES NEED IT, TOO!

Homes as well as schools can now be FINNELL waxed - polished - scrubbed or dry-scrubbed. This is the Household Model — light, speedy and inexpensive. Write for particulars.

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IT WAXES - IT POLISHES - IT FINISHES - IT SCRUBS

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The American school boys and girls of today will guide the destiny of their country tomorrow. . . . The school superintendents and teachers are, therefore, the producers of the nation's most important product; and the school room is the factory in which this work must be performed. . . . The photograph below was taken in 1924. Happy and healthy children have been coming from this room ever since, and will continue to come many years hence. It is equipped with Univent Ventilation.



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In schools where the Univent is in operation, records show a notably high standard of attendance. Children work in an atmosphere conducive to health of body and mind. They are better able to concentrate—to grasp and retain the knowledge that will be so vital in future years.

In selecting the Univent system of ventilation, school executives are meeting their responsibility as guardians of the health and welfare of the children of their community. And in addition, they are carrying out their pledge to tax payers by making an investment in a ventilating system that effects great savings in operating and maintenance costs.

Before you place your sanction on any ventilating system, know the facts about the Univent. Consult your architect or heating engineer, or get in touch with our nearest sales office. If you prefer, write for our illustrated book, "Univent Ventilation."

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Built as an entirety— for your greater satisfaction

From all sections of the country and from officials in schools of every type, come words of praise for Dodge Brothers school buses. Each year finds the list of endorsers larger—each year additional hundreds of these sturdy school buses go into service.

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DODGE BROTHERS SCHOOL BUSES

SOLD AND SERVICED BY DODGE BROTHERS DEALERS EVERYWHERE

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Each year we are called on by more and more school officials to work with them toward the end that their new equipment may lend itself practically to modern educational requirements. Our growth would indicate that our suggestions have been right.

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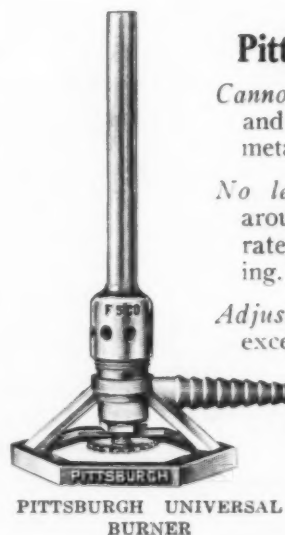
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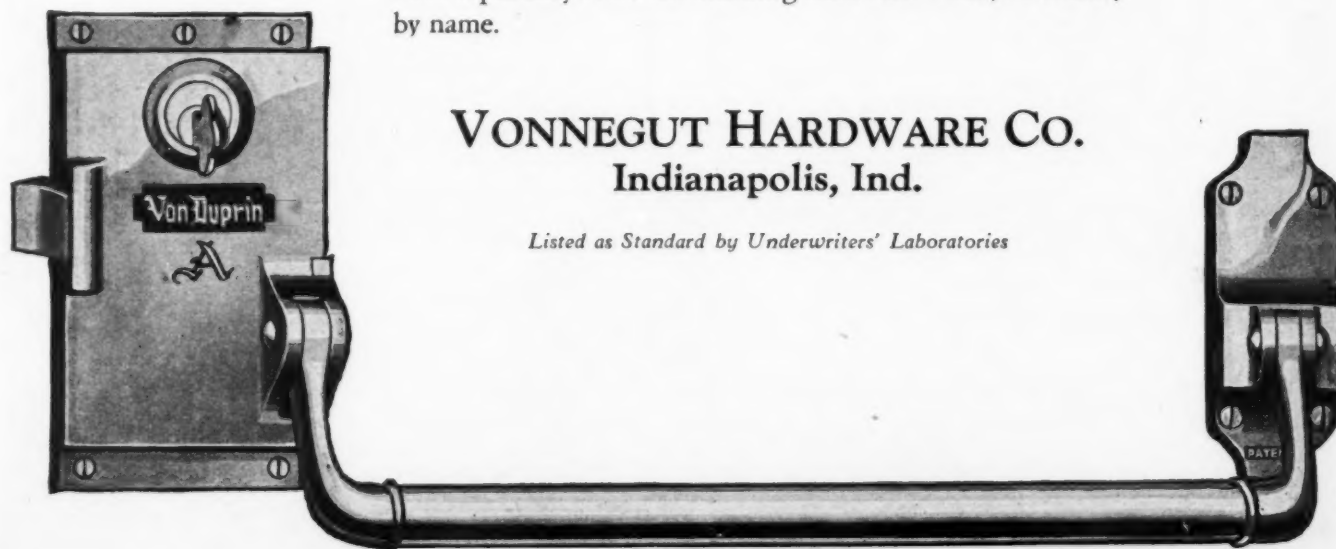
There are two ways in which panic bolts are commonly specified. Some architects include them with the finishing hardware; others make them a separate item of the specifications.

The latter method has the very definite advantage of helping the school board get what is specified. The former always tempts the occasional unscrupulous dealer to substitute cheaper devices as part of the finishing hardware contract.

It is to prevent this that we protect all hardware dealers by selling every reputable dealer at the same fair prices.

As a further means of insuring the delivery of the genuine, we urge that you request your architect to specify panic devices separately from the finishing hardware—and, of course, by name.

Sweets
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VONNEGUT HARDWARE CO.
Indianapolis, Ind.

Listed as Standard by Underwriters' Laboratories

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"Our terrazzo and wood floors always have a beautiful lustre now

And we have cut our floor maintenance costs \$245.00 per year"

Data from
ALVERNIA HIGH SCHOOL, CHICAGO

Given by Sister Superior M. Archangela, in conjunction with Max Polowy, in Charge of Maintenance.

"We have been using Car-Na-Var floor treatment for two years on both terrazzo and hard maple floors. Our experience has been that Car-Na-Var saves labor and material and gives the floors a beautiful lustre never before obtained.

"We formerly varnished our wood floors every year or two. Although we maintained them much as we do now they would become unsightly long before time to revarnish. But with Car-Na-Var our floors are always in excellent condition.

"The terrazzo floors formerly were mopped every week. This required 10 hours labor and 32 lbs. of soap each time. Even this constant mopping did not prevent our terrazzo floors from becoming stained and dirty.

"Comparing costs on both kinds of floors we have found Car-Na-Var slightly cheaper than the soap, varnish and mops previously used. In labor cost, however, Car-Na-Var has shown a yearly saving of \$245.00.

"Here is what our records show since using Car-Na-Var: On hard maple floors total cost of material and labor, 2¼c per sq. ft. per year. On terrazzo, 12½c per sq. ft. per year."

CAR-NA-VAR
TRADE MARK REG. U.S. PAT. OFF.
THE PERFECT FLOOR TREATMENT

On floors of Rubber, use **RUBBER-VAR**
—works like Car-Na-Var

After all what interests YOU most is what Car-Na-Var will do for YOUR floors. Hence our FREE Test offer. Mail coupon opposite for full details. No obligations.

**Make this
FREE Test!**



Car-Na-Var, regularly used at Alvernia High School, Chicago, on 15,000 sq. ft. of terrazzo floor and 28,000 sq. ft. of hard maple floor, gives the floors a lustre never before obtained. Peter Brust, Architect, Milwaukee. W. E. O'Neil Construction Co., Contractor, Chicago.

Car-Na-Var, a scientific combination of varnish gum and waxes for treating wood, linoleum, mastic, cement, cork, terrazzo, etc., is obtainable in "Natural" and the following colors: Dark Oak, Light Oak, Mahogany, Walnut, Olive Green, Bright Green, Mission, Maroon and Cherry.

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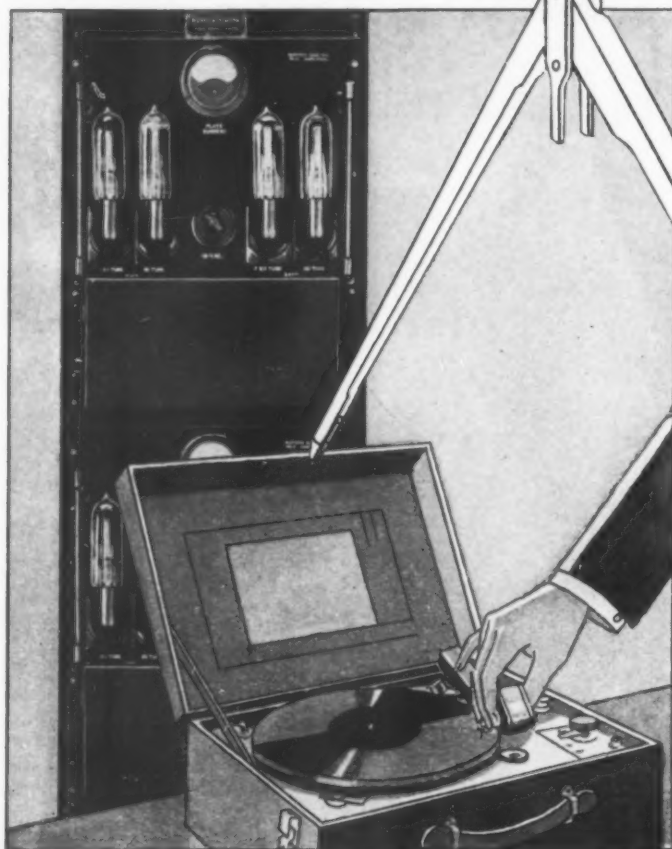
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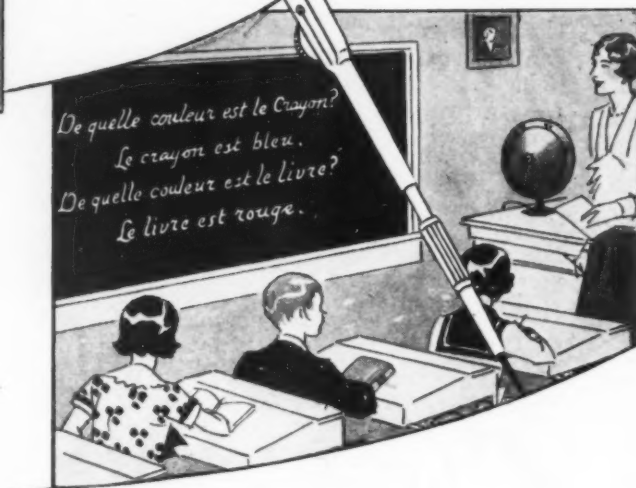


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Bring your modern-language students the voices of cultivated speakers who talk in their native tongue. Give vivid and valuable lessons in accepted pronunciation. Do it with the same equipment that serves music courses—the Western Electric Music Reproduction System.

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The high quality of this reproduction is what



you would expect of equipment made by Western Electric, pioneers in sound transmission. Learn how this system is serving schools. Send the coupon to the distributors, Graybar Electric Company, who have branches in 76 principal cities.

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Gentlemen: Please send us illustrated
booklet on the Music Reproduction System

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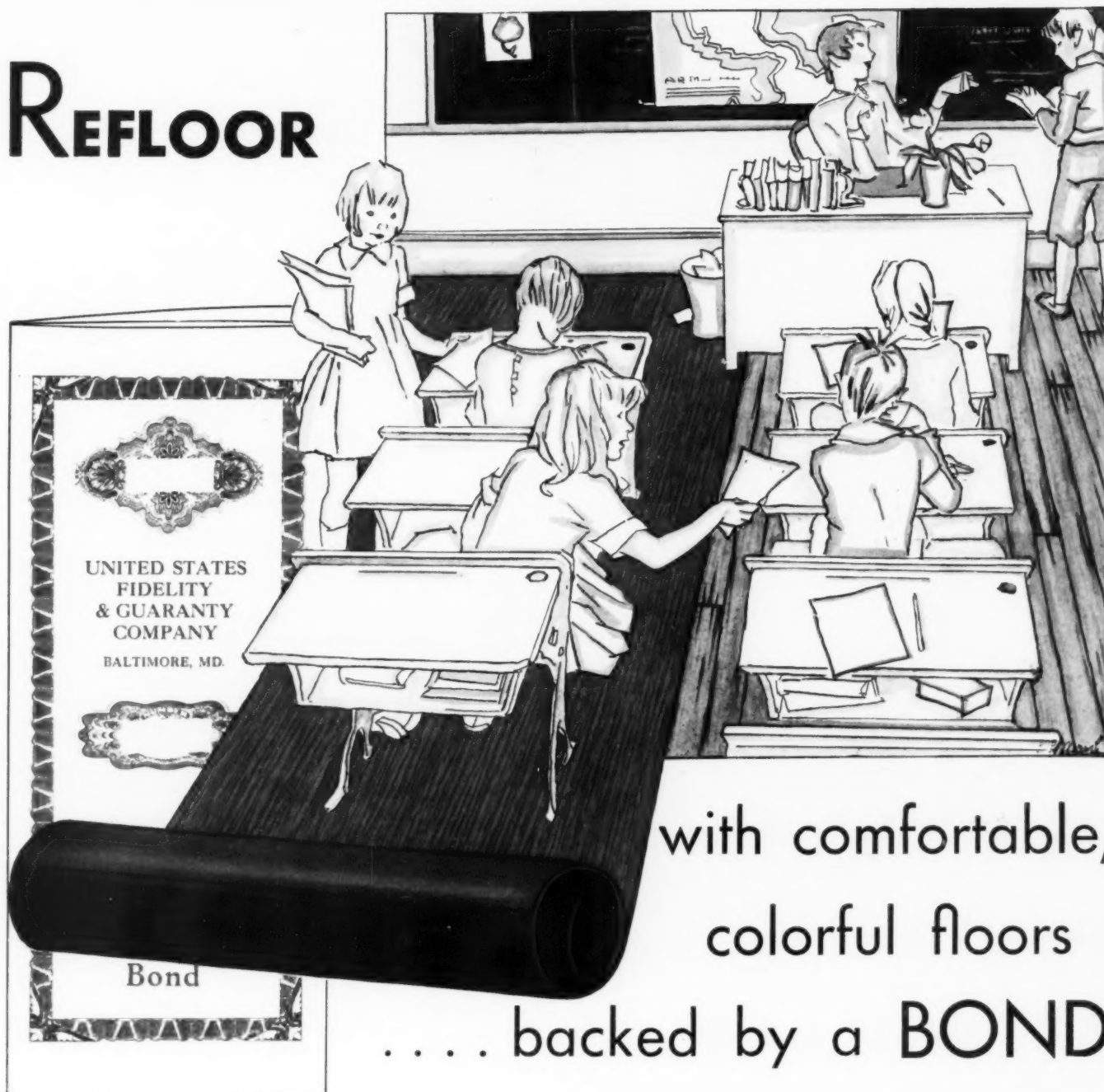
CITY STATE

Western Electric

PUBLIC ADDRESS AND MUSIC REPRODUCTION SYSTEMS

Distributed by GRAYBAR Electric Company

REFLOOR



with comfortable,
colorful floors
..... backed by a **BOND**

A striking contrast between the two sides of this picture! We think it is a realistic representation of the tremendous improvement in appearance that cheerful modern floors will bring to your school-rooms. The color shown is apple green, one of several two-tone effects now available in *Sealex Jaspé Linoleum*. There are many other types of Bonded Floors, equally colorful and attractive, that will aid you in modernizing your school at low cost.

Occasional waxing will preserve the original beauty of your Bonded Floor. It will never require a single can of paint. Or a second of attention from a floor scraper. And the Guaranty Bond protects you against repair expense due to defects in material or workmanship.

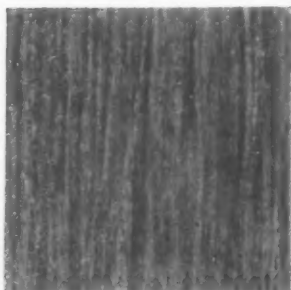
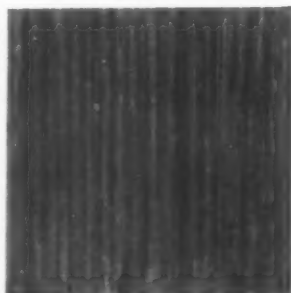
Contrast this beauty and economy with the cumulative expense of a floor that calls for periodic scraping and varnishing. Colors

(See next page)

Colorful floors make cheerful schools . . .

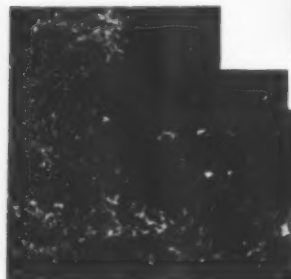
At right: Sealex Jaspé
Linoleum No. 1257—
"Lake Blue."

Below: Sealex Jaspé
Linoleum No. 1258—
"Roseglow."



No printed reproduction can do justice to the mellow two-tone effects of these newest colorings in Sealex Jaspé Linoleum.

"Custom" border effects such as these may be used with Bonded Floors—whether of Sealex Jaspé Linoleum,



Sealex Inlaid Linoleum or Sealex Battleship Linoleum—at little added cost. Many other combinations are possible.

(See preceding page)



of Bonded Floors, on the other hand, cannot wear off, because they go right through from top to bottom of the material. And even spilled ink cannot leave a permanent mark; the Sealex Process of manufacture makes Bonded Floors spot-proof and stain-proof.

In addition, Bonded Floors—whether built of *Sealex Linoleum* or *Sealex Treadlite Tile*—have all the advantages of cork-composition construction. They are resilient, quiet, comfortable underfoot, and provide insulation against heat and cold. Our informative booklet, "Facts You Should Know About Resilient Floors for Schools," will tell you more about these modern, economical floors. Write our Architectural Service Department for your copy.

CONGOLEUM-NAIRN INC. • General Office: Kearny, N. J.

BONDED FLOORS
Sealex Linoleum and Tile  *Backed by a Guaranty Bond*

BONDED FLOORS are floors of *Sealex Linoleum* and *Sealex Treadlite Tile*, backed by a Guaranty Bond issued by the U. S. Fidelity and Guaranty Company. Authorized Contractors of Bonded Floors are located in principal cities.

Syracuse China...

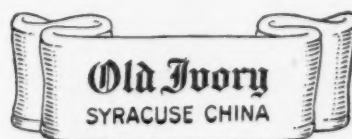
AN AID TO GOOD MANNERS

School authorities know that it is one of their privileges to cultivate on the part of their students good manners in the dining room. Indeed this is part of the training that parents expect will be inculcated when they enter their children. To this end a home-like china service is the very first requisite. ¶ Syracuse China meets this requirement fully. Its appearance and "feel" bespeak the home and the ways of home. Its many attractive designs



*A pattern in Syracuse "Old Ivory"—
designed to order.*

and colors, the fact that it is vitrified and therefore low in breakage, its ready and economical replacement—all these qualities have made Syracuse China the choice of hundreds of the nation's prominent schools. ¶ Nearly all institutional dealers carry Syracuse China. If you have any difficulty, write direct to the Onondaga Pottery Company, Syracuse, New York.



SYRACUSE CHINA

A PRODUCT OF ONONDAGA POTTERIES



Modess—

now vendible difficult
problem solved for teachers
and pupils. Parents approve.

MODESS, made by Johnson & Johnson, is generally accepted as the finest and most comfortable sanitary napkin that is made. Installation of this cabinet vending Modess in girls' rest rooms cannot fail to impress parents with the intelligent interest of school authorities in all matters connected with personal hygiene.

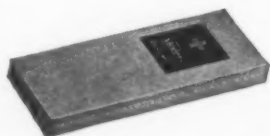
This sanitary service, so necessary to avoidance of delay and embarrassment, is supplied at cost to girl pupils and teachers through five-cent vendors, making it self-supporting.

The cabinet, as illustrated, is mechanically perfect and easily operated. Only the proper coin will deliver the napkin carton. When the cabinet is empty, the coin is returned. Separate lock on coin box gives double protection.

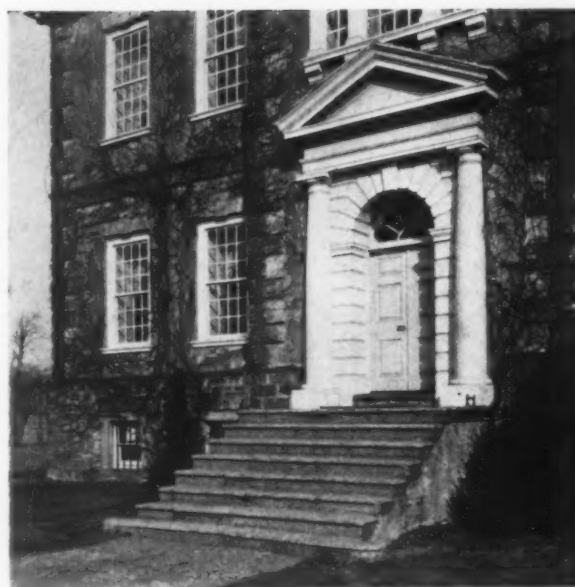
Modess refills and vendors are stocked in more than one hundred distribution points. Prompt service is guaranteed. Write for descriptive circular.

Distributed exclusively in
the United States by

**ROCHESTER
GERMICIDE CO.**
Rochester, N. Y.



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Leave it to the canny Scotch

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No present day schools or hospitals are being built with the hope that their stairs will be serviceable two hundred years from now, but if your's is the responsibility for any public building, you will do well to have Alberene Stone treads, landings, toilet and shower partitions installed. You can then sit back—confident that you have invested in *permanent* satisfaction, safety and economy.

Full information and specifications supplied gladly. Write for Bulletin on Stair Tread and Sanitary Work.

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Chicago Cleveland Pittsburgh Boston Philadelphia Richmond
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Quarries and Mills at Schuyler, Virginia

ALBERENE STONE

— THE NATURAL STONE OF DIVERSIFIED UTILITY —





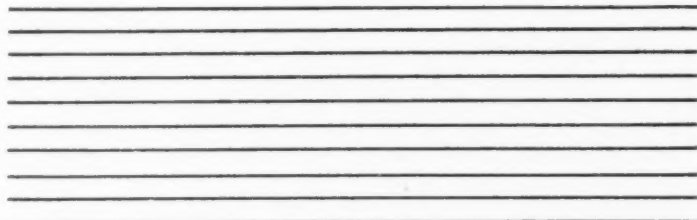
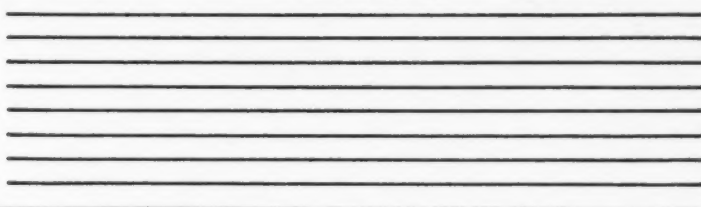
L C SMITH

BULLETIN-CASLON type, with small and capital letters, is now available for the special school work which conserves the sight of visually handicapped children.

Sight-Saving Classes adapt the system to the child rather than the child to the system.

This is BULLETIN-CASLON No. 27 Type

Illustrated above is an accurate reproduction of the actual type sizes.



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PRIMER TYPE on Corona Portable or L C Smith.

This is Corona Primer Type

This large type, which conforms to the size and style in primers, is a valuable aid in the preparation of silent reading seat-work tests.



We shall be glad to send specimens of work prepared with these special types.

L C Smith & Corona
TYPEWRITERS INCORPORATED

722 Washington St., Syracuse, N. Y.

- ☐ Please send me specimens of silent reading seatwork tests prepared on Corona Portable and L C Smith with primer type.
- ☐ Please send me samples of Bulletin-Caslon Type.

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City _____ State _____

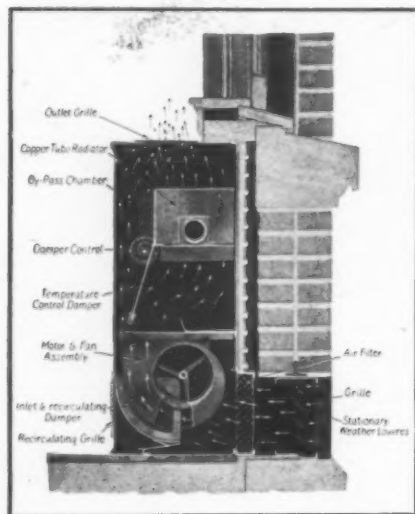


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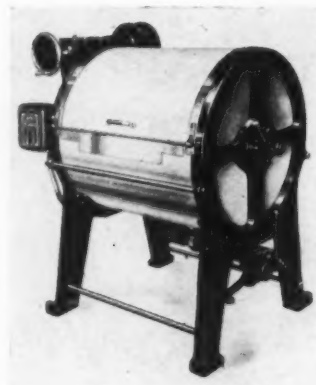
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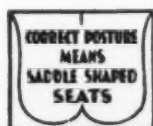
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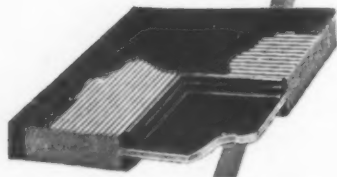
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DEVOTED TO THE APPLICATION OF RESEARCH TO
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VOLUME V

JUNE, 1930

NUMBER 6

What Has Been Accomplished in Educational Administration*

*During the last twenty-five years there has
been a notable increase in the scope and
stability of the position of the school executive*

BY J. B. EDMONSON, DEAN, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

A REVIEW of the developments in school administration over a twenty-five year period discloses a gradual evolution from a status of uncertain leadership to the present achievement of rather highly professionalized direction. With the passing years administration of public education has been growing in favor and the powers and responsibilities delegated to administrative officers have been increasing in scope. This is largely because public interest in education is so great that state and local authorities are determined to have competent and effective administration of schools.

As the first of twelve notable achievements in administration I shall cite the fact that the position of the school executive has been gaining steadily in social favor and has been continually acquiring enlarged responsibilities. On the question of the growth of functions Haggerty¹ says:

"With the passing years the position of school executive grows in social favor and its delegated powers increase in scope and in stability. The accretion of functions is constant, tenure tends to become indeterminate and economic status ever more adequate and secure. It is a matter of deep significance to American life that in hundreds and thousands of communities throughout

the land the school executive, as university president or superintendent of schools, is the most highly salaried public official either in state or local unit; his tenure, although loosely protected by law, tends to remain secure through changing political control and his influence excels in potency that of any other public servant. A tangible expression of this condition is the fact that for few, if any, other positions has the public been willing to accord a salary equal to that of the nation's vice-president, and commonly throughout the country American society pays more for its school executives than it does for any other publicly employed servants whether professional or political in character."

A second achievement in administration is the tendency to raise the standard of requirements for candidates for superintendencies. Special programs have been set up in our schools of education to prepare superintendents to meet their responsibilities. Efforts are being made also to ensure professional preparation on the part of persons appointed to superintendencies. Several years ago the North Central Association of Colleges and Secondary Schools did not attempt to enforce any professional standards for the office of superintendent of schools. It is only within the last ten years that the standards of the association have been revised in such a way as to require both college training and professional training.

*Read at the meeting of the Department of Superintendence of the N. E. A., Atlantic City, N. J., February, 1930.

¹ Haggerty, M. E., Training the Superintendent of Schools, Bulletin of University of Minnesota, No. 17, 1925, p. 3.

Some of the states have set up special requirements for superintendents' licenses. The old assertion, "As is the teacher so is the school," may well be replaced by the new truth, "As is the superintendent so is the school system." The latter pronouncement implies that the superintendent is a powerful agent in setting the standards for school systems. I believe that because of the responsibilities that are entrusted to the superintendent, standardizing agencies and certificating agencies should give more attention to defining the requirements for the office.

Legal Status of Superintendent Changing

As a third achievement in administration I wish to mention the significant changes now taking place in the legal status of school administration. State legislatures are showing a marked tendency to delegate specific duties to the superintendent of schools. Morrison¹ recently made the following statement:

"One of the most significant changes now taking place in the legal status of the city school superintendent is the tendency of legislatures to assign certain specific duties directly to the superintendent of schools.

"Legislatures are inclined to delegate to city superintendents sole responsibility for the performance of certain administrative acts that are not likely to involve controversial issues. This tendency is illustrated by the fact that twenty-six states have delegated to the superintendent responsibility for granting working papers. In thirteen states he is held responsible for making reports to the state education authorities."

It is my opinion that legal guarantees of the power of the superintendent tend to emphasize the professional character of the office and to magnify the importance of the position of the superintendent.

A fourth achievement in administration may be stated as follows: There has developed a clearer understanding of the difference between legislative and executive functions in public education with the result that boards of education have tended to limit their activities to formulating and appraising policies. This recognition has come about partly as a result of the increased professionalization of the school superintendent. Boards of education are quite willing to delegate executive functions to competent and well trained persons. Some school districts have gone so far as to place in writing a statement of the executive functions and the legislative functions together with an explanation of the responsi-

bilities of the different agencies in connection with these functions.

As a fifth achievement I wish to direct attention to the increasing evidence that the public recognizes the validity of the contention of educators that school systems should be independent of the municipal government. Deffenbaugh reports that there has been a tendency to consolidate departments of municipal government in an effort to bring about greater efficiency. He states that authorities on municipal government seem to favor placing the budgets of boards of education under the municipal body that handles the budgets of other departments of local government. Deffenbaugh¹ expresses the opinion, however, that: "As long as education is considered a state and not a municipal function the schools will not become more subordinate to municipal government than they now are. The principle that school officials are state and not municipal officials has been so well established by law and court decisions that any efforts to make the schools a part of the municipal government would be considered by authorities on school administration as a step in the wrong direction."

It is encouraging to school administrators to find that our states are determined that school issues shall be separated from other issues of politics and government. For the progress that has been made in assuring this separation, much credit is due to those school administrators who have constantly emphasized education as a state rather than as a local function and have insisted upon such a type of local organization as would ensure a maximum amount of independence of the schools.

Fewer Committees Appointed

As a sixth achievement in administration I desire to call attention to the increase in the effectiveness of the organization of boards of education. Deffenbaugh finds a steady reduction in the number of standing committees of boards of education. He attributes this tendency to the reduction in the size of boards of education and to a clearer conception of the functions of boards. With the employment of more competent executives in our school systems there has developed a tendency to make these officers the agents of the board in performing all of the chief functions except those of legislation.

One of the problems that has caused much discussion in recent years has arisen from the practice of making the superintendent responsible for the educational management of the schools and

¹ Morrison, J. C., *The City School Superintendent*, *The NATION'S SCHOOLS*, Vol. II, No. 4, p. 57.

¹ Deffenbaugh, W. S., *Significant Movements in City School Systems*, Bulletin No. 16, 1929, Federal Bureau of Education, p. 2.

the business manager responsible for financial affairs. In some school systems these two officers occupy independent positions, and both are directly responsible to the board of education. School administrators are in substantial agreement on the principle that the business manager should be appointed on the recommendation of the superintendent. This principle is based on the conviction that the person who is responsible for the educational management of the school should have responsibility for all work affecting instruction. It also appears that there is a dominant tendency toward the unit system of administration, with the superintendent of schools as the chief officer and with an assistant superintendent in charge of business affairs. This plan certainly offers a logical solution of a problem that has caused much trouble in certain school systems.

More Specialists Employed in Schools

The seventh achievement in administration may be defined as the employment in school systems of a larger number of technically trained specialists. The number of such experts has increased during the last few years because of a desire to bring expert service to bear on certain problems in psychology, vocational guidance, health, curriculum building and special education, and there are other departments for new or technical types of work. As a result of this development the school administrator has the assistance of highly trained specialists in solving certain problems in the field of education.

As an eighth achievement I should like to call attention to the practice of framing policies in terms of the facts. A factual basis has been made possible through the work of bureaus of research in city school systems. It is no longer considered good practice for a school administrator to make snap judgments in important matters, but it has become an accepted policy for school administrators to require facts before making judgments. Thousands of dollars are being expended for the maintenance of research divisions. A recent inquiry¹ showed that bureaus of research are maintained in 108 of the cities of more than 30,000 population and in forty-six cities between 10,000 and 30,000 population. These research divisions have made possible a continuous self-survey. Frequently the self-surveys are carried on with the counsel and advice of outside experts. In any case, it is no longer considered good practice to operate a school system without such analyses of operations as will give a factual basis for administration. This continuous self-survey has

gained recognition as a necessary activity of the progressive school system.

The ninth achievement in administration is the increasing tendency of progressive school systems to define school programs in terms that will be clear and understandable to the public. The most efficient school administration has a definite program of objectives for the guidance of pupils, teachers and the public. The importance of a clear definition of the program of a school system has created increased confidence on the part of the public in school administrators. A well trained administrator does not attempt to administer the schools in terms of an indefinite and unorganized program.

A tenth achievement in administration is the success with which administrators have met the demands placed upon the schools by the far-reaching economic and social changes that have occurred since 1920. In the six years following 1920 public school enrollments increased by 3,000,000. More than half of this increase was in the high school. This situation has necessitated the erection of many new buildings and has greatly increased the operating expenses. From 1920 to 1926 the value of school property increased from \$2,400,000,000 to \$4,675,000,000. The raising of the millions of dollars required by this tremendous capital outlay, as well as the expenditures of the vast sum, reflects great credit upon school administrators.

What Secondary Schools Are Doing

The remarkable extension of the opportunities of secondary education in the United States offers further evidence of the success of school administration. In 1920 only 26 per cent of the total population of secondary school age was to be found in the secondary schools. In 1926 this had increased to 38 per cent. In California, reports indicate that about 75 per cent of the children of high school age are in school. Educational opportunities have been extended within the past few years by the establishment of new types of secondary schools. According to the last report of the Federal Bureau of Education, 250 cities reported that they maintained part-time and continuation schools, with approximately 300,000 pupils enrolled and 77 cities reported full-time vocational schools, enrolling about 45,000 pupils. The school administrators of America are in charge of one of the country's largest businesses as far as capital outlay, expenditures for operation and number of employees are concerned. This development constitutes a real achievement.

An eleventh achievement in administration may be defined as an increasing tendency upon the part

¹ Facts furnished by Research Division of the National Education Association.

of the public to look to school administrators for leadership in the solution of community problems. Communities are now looking to the superintendent of schools and to other administrative officers for help in solving local problems, especially those relating to the moral, social and recreational life of the community. This development is in part the result of the wonderful opportunity created by luncheon clubs and other organizations for school administrators to participate in community affairs.

How Associations Help

As a twelfth achievement I should like to call attention to the success with which school administrators have built strong and aggressive professional organizations. These organizations have been developed in most of the states. In the Department of Superintendence of the N. E. A., school administrators have an organization that is exercising a powerful influence on American education and that offers an opportunity for a professional affiliation comparable to that enjoyed by the lawyer in the American Bar Association or the physician in the American Medical Association. A few years ago the National Education Association adopted the ideal, "a stabilized, all inclusive membership and the entire profession at work on its problems." Real progress has been made in putting this ideal into effect and much of the success must be attributed to the splendid leadership of school administrators. The Department of Superintendence is entitled to much praise for the work that it has done in stimulating studies in the field of the curriculum and in supervision, school finance, articulation and numerous other educational problems. It must be conceded that school administrators have in the last decade departed from the marked individualism of the earlier day and have developed a splendid cooperative organization. As Morgan said in a recent issue of the *Journal of the National Education Association*, "The superintendent holds a mighty responsibility. American life needs unity. The school system supplies that unity. The school system itself needs unity. The superintendent takes the lead in seeing that unity is achieved." I do not know of any achievement that is likely to mean more to American education in the future than the recognition by school administrators of their responsibility for furnishing real leadership in the teaching professions.

The twelve achievements mentioned do not cover all that has been accomplished in educational administration, but enough have been mentioned to give administrators a feeling of pride in their profession.

Surveying the Educational System of Wisconsin

A survey of the educational system of Wisconsin has just been completed by the Wisconsin State Teachers' Association. The following data regarding the school system have been secured:

Students

- a. 146,000 children enrolled in rural elementary schools.
- b. 263,556 children enrolled in state graded, village, and city elementary schools.
- c. 7,500 children enrolled in defective speech, deaf, blind and opportunity schools.
- d. 110,654 boys and girls enrolled in junior and senior high schools.
- e. 34,170 boys and girls between the ages of fourteen and eighteen enrolled in vocational or part-time day schools.
- f. 6,000 men and women enrolled in nine state teachers' colleges, Stout Institute and the mining school.
- g. 9,468 men and women enrolled in the University of Wisconsin.
- h. 10,250 teachers and other students enrolled in the University of Wisconsin, the state teachers' colleges and Stout Institute summer school sessions.
- i. 43,757 adults enrolled in vocational evening schools.
- j. 16,000 men and women enrolled in credit and noncredit extension courses in various universities.

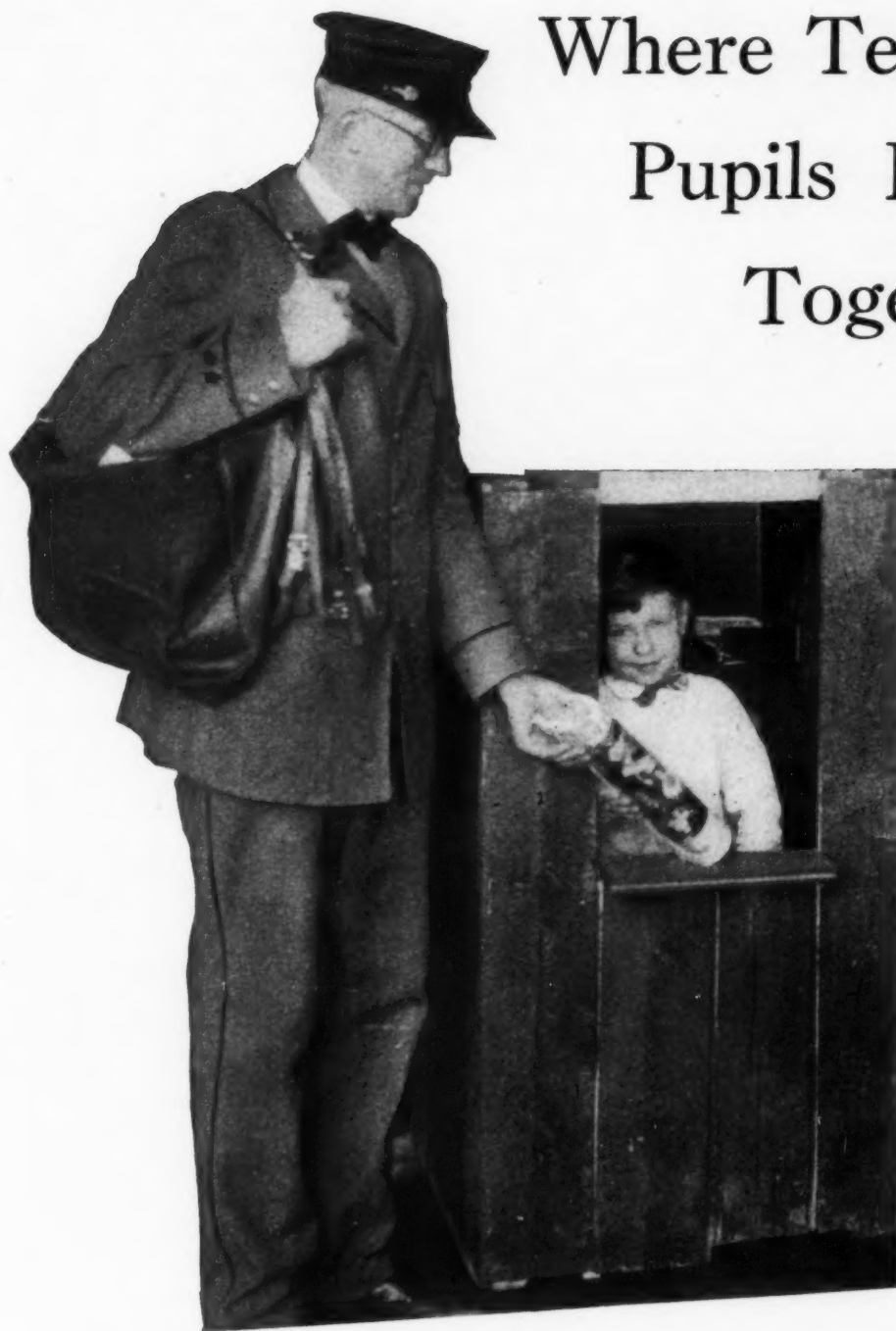
Teachers

- a. 20,390 teachers, superintendents and supervisors of elementary and secondary schools of whom 17,098, or 83.8 per cent are women and 3,292, or 16.2 per cent are men.
- b. 640 teachers in vocational day schools.
- c. 500 members of the faculties of state teachers' colleges, Stout Institute, and the mining school.
- d. 993 administrators, deans, full and part-time teachers who are at the University of Wisconsin.
- e. 1,100 teachers of the adult evening vocational schools.

Buildings

- a. Hundreds of public school buildings that are often mistaken for the American school, but that are really only an item of equipment. The public school building is to Wisconsin what the cathedral is to Europe. It occupies a prominent place in every community, large or small, rich or poor, at every crossroad and in between. It is evidence of Wisconsin's faith in its youth.

Where Teachers and Pupils Progress Together



BY
THOMAS R. COLE,
FORMERLY
SUPERINTENDENT
OF SCHOOLS,
SEATTLE, WASH.

government or international relationships, have taught us anything of lasting value in the past decade, their lesson has been that of the benefits that accrue from active cooperation in the solution of mutual problems. "We are passing," declares President Hoover, "from a period of extremely

THE provision of means whereby teachers may grow continuously in service represents a cooperative enterprise in Seattle, involving the united efforts of the administrative staff, the principals and the classroom teachers.

Creative participation by the teaching corps in the development of such agencies as the demonstration school, professional courses giving recognition on the salary schedule, sabbatical leave for study and travel and other means for in-service training, has been an effective guarantee of their intelligent acceptance and use.

If principles of control evolved by modern thinking, whether in matters of business, labor,

individualistic action into a period of associated activities."¹

In Seattle, supervisors, principals and teachers meet around a common table to share in making the rules and regulations under which they work. The participation of the teaching staff, under supervisory leadership, in building the curriculum, in selecting textbooks and in solving other problems affecting classroom conditions, is not merely to give the superintendent the help teachers are competent to give, but also to vitalize teaching and to relate the classroom service of

¹ Beard, Charles A., *Epilogue from Whither Mankind*, Longmans, Green and Company, New York, 1928.

the teacher to the whole program of the school.

Recently an advisory group of elementary and junior high school teachers, under the direction of an assistant superintendent, has been examining a number of new arithmetic textbooks, weighing the approach of each as it endeavors to relate the study of mathematics to the everyday numerical problems of children. When a text has been selected and the course of study modified accordingly, a skillful demonstration in its use at the Summit Demonstration School will doubtless make the reasons for its selection clear to the entire staff.

It may be taken for granted that no curriculum change of consequence will be undertaken at present in Seattle without taking counsel with those who will use the changed curriculum. In the final analysis we recognize the teacher as the central quality determining factor in the system. She is the converging point for all the activities of her group. There is no question of her right to participate. She is participating. She is shaping, balancing, simplifying the school environment as a dynamic part of community life. She is translating schedules of subjects and administrative policies into "Education in the Spirit of Life" for boys and girls.

To call upon this vast fund of teacher experience for seeing, studying and solving problems is to earn actual educational dividends in the increased efficiency of the school service. In return the administration is faced with the definite responsibility of providing suitable opportunities to enable the teacher to grow in service. The resources of a modern educational laboratory—the city school system—must be placed at her command, and she must be given expert assistance in utilizing these resources effectively.

The Purpose of the Demonstration School

Curriculum revision in Seattle may thus be said to have resolved itself into two distinct lines of endeavor: (1) construction of new courses and revision of old by special committees and (2) administrative follow-up to secure the successful functioning of the new courses.

To describe in any detail Seattle's machinery for carrying out these two functions would take us beyond the limits and scope of this article. The organization of committees for the work of revision and the follow-up in the classroom, under the leadership of supervisors and principals, differ perhaps in minor details only from those of other systems that recognize the value of teacher participation in the curricular development of the school program.

Seattle's demonstration school, however, has

been in operation long enough, and its service to the teacher has been sufficiently well analyzed to warrant a more extended description of its function and value. It serves a double purpose, first as a means of showing teachers what the administration expects them to do, and second as a means of interpreting to the superintendent's staff the difficulties, the successes and the needs of the eighty other elementary schools of the city.

Defining the Point of View

Leaving the work of curriculum building and revision to the more representative groups of teachers and supervisors already mentioned briefly, the demonstration school confines its endeavors largely to placing a workable interpretation on progressive educational practices and procedures that have received the sanction of the administration.

In a summary of replies from an inquiry blank sent in 1928 to fourteen representative cities regarding the types of work that demonstration schools exemplify, the principal of Summit School pointed out that it seems to be the common practice to confine the work of demonstration schools to that mentioned most frequently in the replies, namely, putting into operation the accepted principles and methods of the school system. Only one of the fourteen schools reported that its main purpose is to make and test new courses of study, while one other reported that it engages only incidentally in revising the curriculum.¹

Probably no one now questions the desirability of providing for pupil differences through group and individual instruction, and of utilizing children's interests and experiences in creative activities. Skillful accomplishment, however, lags behind purpose. Revised courses of study that express the present forward movement of educational philosophy, even when confined to tested practice, need more than mere explanation to make them usable throughout a school system.

As previously stated, the Summit School has confined its activities to an interpretation of courses of study in terms of classroom procedure. The point of view of the courses of study is further emphasized by the following statement of principles for the guidance of work in the elementary schools.²

The Seattle school system is committed to the following program and stands for its active development in all elementary grades: (1) further improvement in both silent and audience reading...; (2) the intelligent use of problems

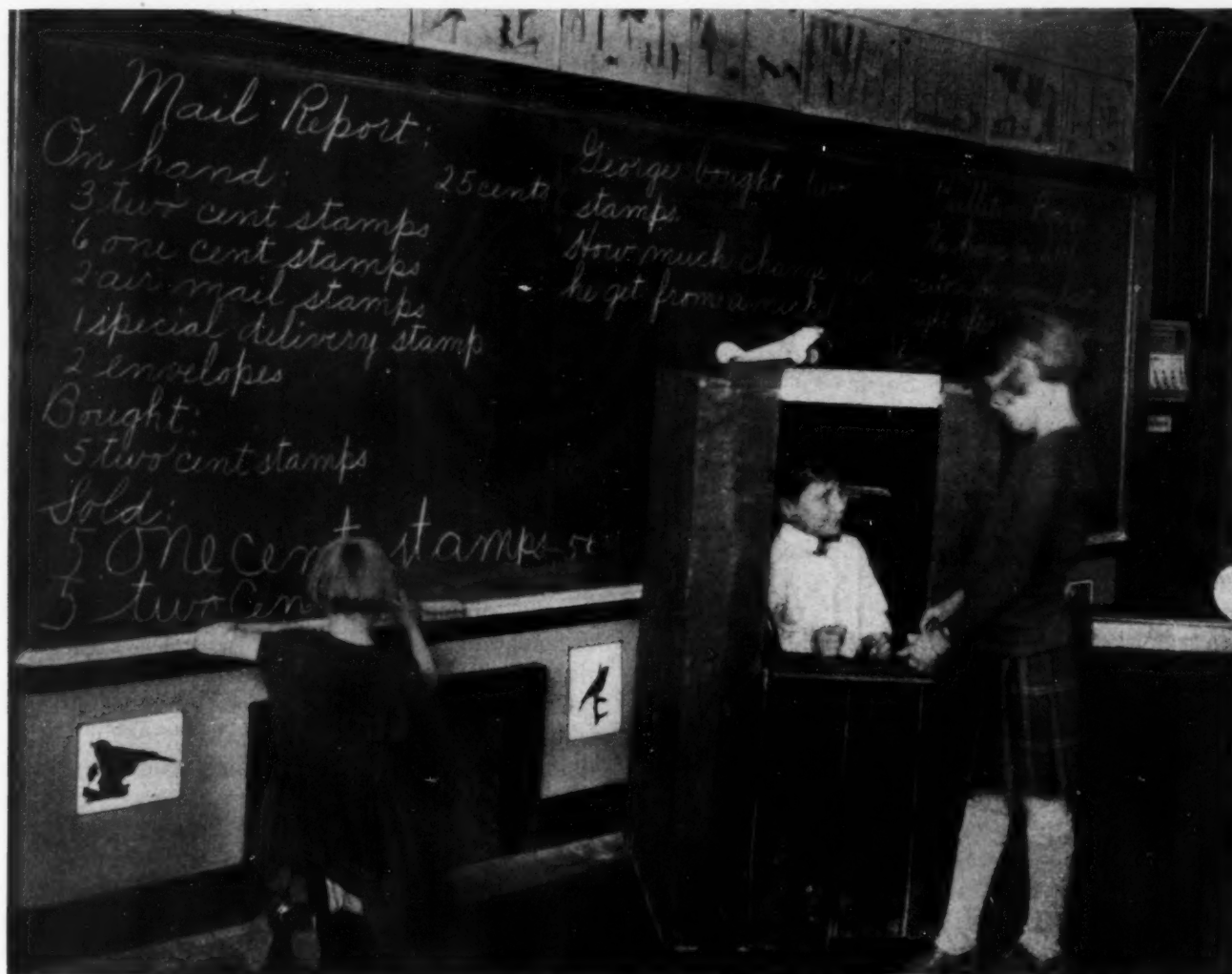
¹ Smith, W. Virgil, *The Function and the Value of a Demonstration School*, *Elementary School Journal*, December, 1928, p. 267.

² Formulated by F. E. Willard, assistant superintendent of schools, Seattle, Wash.

and projects in the study of social subjects; (3) the free use of suitable activities—dramatic, graphic, constructive—to make all studies of human relationships concrete, real and meaningful...; (4) the adaptation of formal drill, as in

that engage the efforts of the demonstration teachers, as outlined by the principal, will be suggestive of the problems with which the school is confronted.

1. To carry on an extensive reading program



On opening day, the Summit School post office did three cents worth of business and with a little publicity expects to increase its sales.

arithmetic, place locations, spelling, language forms, to individual needs in substitution for mass drill, and the handling of both this work and factual review work so that each individual of the class will be suitably occupied all the time.

The work of the demonstration school has chiefly consisted of an attempt to give artistic expression, through approved classroom procedure, to the spirit and purpose of these courses of study and of this statement of principles for the elementary schools.

The Summit teachers are working together to find the best answer to the problems that arise in this connection in the experience both of new teachers who are seeking to develop right standards of work and of experienced teachers who are called upon to readjust their practice to newer standards. A few of the types of work

and still secure the benefits that are the result of intensive training in special reading ability.

2. To provide for the teaching of arithmetical processes through life situations.

3. To have all drill work on an individual basis and where there is a recognized need for such work.

4. To determine the use of technical grammar and to provide for its teaching through a functional approach.

5. To provide for individual differences through supplementary projects instead of segregation, where segregation would result in a marked difference in social and physiological age.

6. To provide an opportunity for children to acquire a rich background of normal school experiences and correct some erroneous ones, these experiences to be used as the point of departure

TABLE I—SUMMARY OF THE OPINIONS OF 86 VISITORS AS TO THE VALUE OF DEMONSTRATIONS

	<i>Percentage of Replies</i>
1. To see classes in action gives a clearer idea and leads to more vivid and lasting impressions than can be obtained by mere discussion or reading of theory and practice	40
2. Reactions of pupils to methods prove that theory is or is not workable ..	16
3. Helpful to see expert teacher develop work and handle problems that are met in regular classroom situations	16
4. Demonstrations are more inspirational	4
5. Demonstration lessons prepare the way for more motivated discussions ..	6
6. Discussions are usually positive; demonstrations bring out negative factors as well	4
Total	86

when invoking the doctrine of "children's interests in school work."

7. To indicate the relative place and function of formal materials of instruction and activities.

8. To show the need for having the teacher determine the many desirable outcomes of any given unit of work in order that he may intelligently direct the pupils' activities.

9. To interpret the teacher's rôle in seeing (a) that only worth while experiences are engaged in, the children being prevented from spending their time on relatively unimportant aspects of their environment, from which they gain only superficial values; (b) that children do not direct their efforts entirely to the physical and manual aspects of creative work and neglect the mental aspect; (c) that activities are so selected and graded that children are led to participate in experiences and intellectual endeavors on progressively higher levels.

The superiority of the demonstration lesson over discussions or teachers' meetings, as a means of acquainting teachers in service with accepted procedures, was ably defined in the recent observations of a Seattle elementary school principal following a visit at Summit School:

"Seeing actual management of classroom work is far better than theory. I would liken a demonstration as compared with a discussion to actually seeing a picture or place and having someone describe it."

A symposium of the opinions of eighty-six visitors at the demonstration school, who returned an inquiry blank as to the relative effectiveness of teachers' meetings and demonstration lessons, suggests additional values. These are given in Table I.

Owing to the large number of teachers the school is expected to serve, the opportunity to visit the school more than once or twice in the course of a year can seldom be granted. Of necessity, therefore, every means that will assist the visitor in securing an intelligent understanding of the classroom activity and the philosophy upon which the work is based must be provided.

Quite obviously a better appraisal of classroom procedure can be made where visitors are supplied with preliminary information concerning the character of the work to be observed. To this end visitors are provided at each demonstration with an outline or program that (1) explains certain phases of the work to be observed and

TABLE II—SUMMARY OF THE OPINIONS OF 86 VISITORS AS TO THE VALUE OF THE CONFERENCE

	<i>Percentage of Replies</i>
1. Conferences afford an opportunity to discuss principles and purposes underlying the instruction	25
2. Through conferences, methods of procedure and plans for the work that is to follow are evaluated	22
3. Conferences serve as a means of growth through exchange of ideas ...	17
4. Gives opportunity to discuss methods of approach	10
5. Gives opportunity to discover background of lesson	10
6. Gives opportunity to ask questions without interrupting class work	2
Total	86

(2) contains points for consideration in evaluating the lesson in light of educational principles. A short meeting is held in the principal's office at which the program is read and discussed.

The conference period of from thirty to forty minutes following the demonstration offers a unique opportunity for both supervisors and teachers in the solution of mutual problems. Frank discussion, inquiry, advice and contrary views are invited and impersonally considered. Questions as to the basis for procedures are earnestly sought by the demonstration school

"show" school in any sense of those terms. It is an ordinary school, with an enrollment of about 560, possessing in no way ideal conditions and facing many problems typical of the average elementary school—apartment house life for the children, lack of sufficient playground space, traffic hazards, a transient population and parents who work all day. The school building is old and presents the problem of evolving equipment to meet new needs.

Through a flexible organization of department heads and teachers, under the direction of



The conference period following the demonstration offers a unique opportunity for both supervisor and teachers to discuss mutual problems.

teacher and often she brings some baffling problem before the visiting group.

Since a close understanding between the Summit School and the superintendent's office is desirable, the head of the department of primary methods, the head of the department of intermediate grades and an assistant superintendent are usually present at both demonstration and conference, but only to assist in the discussion and interpretation of the work done.

The teachers in turn speak with equal enthusiasm of the conference period. The opinions given in Table II will serve to reflect the general attitude toward the group discussion period.

Summit School was selected for demonstration purposes because of its accessibility to all sections of the city. It is not intended as a "model" or

Assistant Superintendent S. E. Fleming, the high schools have been enabled to keep their courses of study responsive to the needs of a widely differing population.

Subject demonstrations conducted by teaching experts and attended by representatives from the nine high schools of the city, have paralleled closely the development of the school program, thus ensuring its understanding by the entire high school staff. In 1928 a formulation of definite observable evidences of good teaching in the various subjects, preceded a series of demonstrations exemplifying the results of the study.

The high school demonstrations have been of material assistance to junior high school teachers in their efforts to correlate the ninth grade courses, which they offer, with the secondary

school curriculum. Similarly seventh and eighth grade demonstrations at Summit School have aided the smooth introduction of the junior high school into the system.

There are many problems, however, that are peculiar to schools serving boys and girls of junior high school age, and the development of a curriculum that will exactly fit the purposes and organization of the junior high school is the major professional interest of this group of teachers. Since the junior high schools did not become a part of the Seattle system until 1927, many courses of study are now being formulated in round table conferences of teachers and supervisors. As each course is issued in tentative form, demonstrations are held in individual classrooms to test its efficacy in practice.

The junior and senior high school plans of curriculum building illustrate well the Seattle procedure already mentioned of (1) construction of new courses and revision of old by special committees and (2) cooperative devices of supervisors and teachers to ensure their effective operation in the classroom.

Teacher participation in the development of the school program has suggested many problems needing further study and investigation. In seeking to provide special agencies for carrying on study and research, Seattle has found the professional courses and lectures and sabbatical leave for study and travel to be outstanding in effectiveness.

Professional Courses Are Popular

With the development of junior high schools and platoon schools and especially with the expansion of the modern high school curriculum to meet the interests of a widely differing population, the teacher's work is becoming more specialized in particular fields of study and in particular departmental problems. While teachers' colleges and schools of education have been alive to this need, they have been unable to meet the situation fully because of the variety of demands. They face an additional difficulty in the fact that many of the courses, to be successful, must be presented by those who have had experience in the actual carrying out of the newer policies.

Recognizing this double difficulty, and knowing that there was among the teachers, principals and supervisors in the corps and at the University of Washington in the city an abundance of talent for giving just such courses, the Seattle schools have developed a program of professional courses designed to fit as closely as possible into the classroom problems of the teacher.

After one and a half years of experience with

the professional courses, both the Seattle administrative staff and the teachers themselves are enthusiastic as to their value. As registrations are entirely voluntary and as work taken elsewhere in standard institutions is accorded the same credit, the consistently large enrollments since the adoption of the courses in October, 1928, indicate a real desire on the part of Seattle teachers for this type of service. In fact the teachers themselves determine by suggestions and by their registrations the courses that shall be offered.

Types of Courses Offered

The first series offered by the Seattle schools included the following fifteen courses: Children's Literature; Arithmetic in the Primary Grades; Arithmetic for Grades 4, 5 and 6; Kindergarten Curriculum; the Problem Child; Music in the Primary Grades; Junior High School Organization; Reading-Library; Physical Education; Teaching of Literature for High School Teachers; Boat Drawing for Industrial Arts Teachers; Teaching of Community Civics for High School Teachers; Nature Study; Language for Grades 4, 5 and 6; Fine and Industrial Arts.

The second series included the following courses: Nature Study for Teachers; Reading-Library (second semester); Language for Grammar Grades; Elementary School Hygiene; Exercise and Deformities; Teaching of Community Civics (second semester); the New Findings in Nutrition Work; Teaching Composition in the High School; Elements of Airplane Construction; Unit Mastery Technique; Children's Literature (second semester); Geography for Intermediate and Grammar Grades; the Problem Child (second semester); Teaching U. S. History in the High School; Classroom Techniques; Modern Trends in Commercial Education; Vocational Guidance; Latin Seminar.

Of these 33 courses, 5 were taught by members of the University of Washington faculty, 9 by public school principals, 3 by public school teachers, 11 by public school supervisors, 1 by a public school assistant superintendent, 1 by a physician, 2 by a city librarian and 1 by an engineer.

It will be noted that the courses offered were designed to meet as exactly as possible the interests of particular groups of teachers. The instructor in each course was a person recognized as sufficiently expert and accomplished, as well as experienced in the particular field, to make the work profitable and interesting.

Each course except seminars and laboratory courses consists of ten lectures of sixty minutes each. For each course teachers pay an enroll-

In the Summit School reading-library room, the art and reading teachers demonstrate how the teaching of these subjects may be correlated in worthwhile creative activities.



ment fee of \$2. The balance of the cost is met with regular evening school funds. Instructors are paid a uniform rate of \$8 for a ten-lecture course.

The "single salary" schedule introduced into the system in 1928 provides the same salary for teachers in elementary, junior and senior high schools, based upon preparation. In rating educational credits to apply on this schedule, recognition is given for training that actually helps the teacher in her work, as an encouragement to choose for study courses and opportunities that will be of practical assistance, rather than taking something available by extension simply because it will give credit toward a degree or diploma. Credit for the professional courses is therefore given on the same basis as that for university extension lectures. This is no doubt an incentive to some, although many take the courses who are not working for credits.

Lectures and conferences conducted by educational leaders brought to Seattle by the administration, have been accepted with enthusiasm by the teaching staff. In accordance with this plan, such educators as Dean W. S. Gray and Dr. W. C. Reavis of the University of Chicago and Dr. James F. Hosic of Teachers College, Columbia University, have appeared before the teaching staff.

Many valuable problems for classroom research, having a remedial program as their main objective, have been suggested by professional study or lectures or by the work of curriculum revision. During the school term, Seattle class-

rooms become educational laboratories where new theories are initiated, tested, accepted or rejected.

Various professional study clubs, such as the Seattle Principals' Association, the Grade Teachers' Club, the Junior High School Club and other special groups, have taken up for investigation problems suggested by curriculum research.

Creative participation in the development of the school program gives directive force to the study carried on by Seattle principals and teachers under the sabbatical leave plan. As Doctor Cubberley points out, "there is an inspiration to further activity that comes from creative work that the passive recipient of the work of others never knows."¹

The Seattle plan provides that a leave of one or two semesters may be granted for the purpose of either study or travel. Teachers are eligible who have served seven or more years, and the applicants signify their intention of returning to the Seattle schools after the leave has expired. A uniform salary of \$80 a month for ten months is paid, and not more than thirty teachers are released by leave each semester.

"School children of to-day are growing up to be, in a very literal sense, citizens of the world," writes Gilbert Grosvenor, editor, *National Geographic Magazine*. "All the inventive genius that has gone into developing railways, automobiles, steamships, airplanes and the complex organizations for operating them, have a single, simple

¹ Cubberley, Ellwood P., *Public School Administration*, Houghton Mifflin Company, New York, 1929.



The child who has made the highest score in the reading test is eligible for the coveted position of postman. He serves two weeks and then trains his successor.

human effect, that of making it easier and cheaper for us to go places that our grandfathers never thought of visiting.

"And even when we stay at home, the telephone, the radio, the motion picture and the printed photograph, especially with the development of color photography, have a similar effect of conveying us to far-away places."

All this means that the teacher of to-day must be prepared to interpret, from her own observation and experience, significant features of this stream of sights and sounds that pours in upon her pupils' minds. Ten years ago a teacher used to say that if she guided her pupils to read wisely she had accomplished much. To-day's teacher must also guide her pupils to see and hear wisely. The sabbatical leave plan enables the teacher to make real and vivid to her pupils the interesting features of the world in which we live.

Perhaps the most eloquent statements in behalf of travel as a means of professional growth have been expressed by the Seattle teachers themselves. The following excerpt quoted from a teacher's letter written while she was traveling in the Philippine Islands on sabbatical leave is quoted as an example:

"I wish everyone in the corps could be 'sabbaticated.' It gives one a new lease on life, new ideas and new inspirations professionally. It is wonderful to have time to read, to visit places of interest, to be always free, and, like the old colored gentleman, 'to set and think, or sometimes jest set.'

"I am going to Hawaii, the big island, before I return. I hope the volcano will be carrying on an 'activity' program for I'd like to see a sample of the ancient version of hell."

The character of our changing civilization makes it increasingly necessary that pupils be taught to think for themselves and to make wise decisions in adjusting themselves to the demands of community life. Latitude for the teacher to express individuality and initiative is equally important. The provision of collective means for the in-service improvement of the teacher, functioning through the administration, instead of reducing the freedom of the individual teacher, enlarges it by placing on her side the resources of the school system.

Such a program, in the words of Doctor Kilpatrick, seeks to "increase to the maximum feasible the efficient self-direction of the teacher, with shared participation in joint responsibilities."¹

Under the inspiration of creative work, the teacher becomes a true artist. As such she presents a sharp contrast to the "mechanic teacher" described by Doctor Rugg as a "blind, helpless cog in the great machine of education. The mechanical teacher has no chance to be a person in her own right; duty, discipline, the requirements of authorities higher up, order her day—bar her from human contact with the children she is employed to instruct."²

Teacher participation in the development of the school program offers the same freedom, the same purposeful endeavor and the same encouragement of individual responsibility to the teacher as she demands for her pupils. Her teaching job becomes one in which she may feel the satisfaction of planning, executing and participating, with the assurance that her individual efforts will be recognized.

Ohio's Program of Physical Education

The program fostered by the Ohio State Department of Education in health and physical education has three general divisions: health service, health instruction and physical education. It has become a definite state policy to combine the activities of health education with those of physical education. Separation of the two may exist in certain communities, but for the general program of the state a union has been effected. This union permits a broad program of health care and physical activities to be developed under the same auspices and puts both health education and physical education within the reach of every school district.

¹ Kilpatrick, William H., *Education for a Changing Civilization*, The Macmillan Company, New York, 1926.

² Rugg and Shumaker, *The Child Centered School*, World Book Company, New York, 1928.

Defining the Duties of the City Superintendent

It has been roughly estimated that the heads of schools devote less than one-fourth of their time to supervisory duties, and suggestions are offered for remedying this unfortunate situation

BY PAUL FLEMING, VICE-PRINCIPAL, OAKLAND HIGH SCHOOL, OAKLAND, CALIF.

THE position of city superintendent of schools in the United States has never been fully defined. Recent studies have shown that in general he has no legal status but has simply the authority delegated to him by the board of education. More and more, however, whether by state statute, by city charter or by the rules of the city boards of education, the duties of a city superintendent and his authority are being clearly set forth.

In the history of American education the superintendent has passed through several phases. In most cases he was first a head teacher, sometimes even teaching classes. He was forced to serve on lay boards of education because, as in Boston in 1845, the board members realized that the duties of administering schools were becoming too demanding and complex for them. The first superintendents were supervisors of subject matter and teaching. Boards of education retained, almost entirely, the business functions and all matters of personnel. This state of affairs was common throughout American cities until the beginning of the present century.

Selecting Teachers

With the scientific study of education, with greatly increased attendance in schools, with the complexity of modern life, greater demands were made on the schools. These factors, and the influence of aggressive, able men in city positions led city superintendents to assume more of the functions formerly fulfilled by board members. The most important of these was the selection of teachers. In cities of 50,000 or over the superintendent's recommendation of a teacher is now nearly equivalent to an election. Superintendents also began to have some responsibility in other matters of organization, such as the arrangement of a business department or the placement of new buildings.

From these developments came the function of the superintendent which is now receiving the most emphasis—that of acting as the executive

officer of the board, the professional head with large responsibilities in the business affairs of the schools. A duty recently placed on the superintendent has been the responsibility for establishing contact with the community he serves. Large public service corporations have added a new member to their force, a glorified press agent with far wider functions—"the public relations counsel." The city superintendent of to-day has become "the public relations counsel" for the schools.

Superintendent's Duties Are Manifold

The modern city superintendent is an organizer of his system, a director of personnel, a business executive and a publicity man. These functions have now somewhat overshadowed his work as a supervisor of teaching. If he is superintendent in a large city this function filters down through assistants, special subject or district supervisors, or principals, to teachers, so that it is a third-hand or even more remote contact. If he is the head of a small system without a staff he makes a few hasty visits and has a few hurried conferences with teachers and principals.

The present professional heads of most American city schools have become "office superintendents." Probably it is not possible for the superintendent whether in a large or small city to give effective firsthand help to classroom teachers. Is it impossible, however, for him to exert his influence for better teaching through his contacts with principals and supervisors in a more complete way than is now being done?

Before considering an analysis of the supervisory functions of the superintendent it probably will be profitable to discuss a little further the idea of the division of functions. Certainly we cannot discuss intelligently what the superintendent does as a supervisor before we have some clear idea of what he does as an executive. We may assume that the superintendent has four functions: executive, organization, publicity, supervision. In so complex an organization as a

city school system, these overlap to a considerable extent. Thus it is not always clear to which classification we should assign any particular action of the superintendent. It seems possible, however, by brief definition and example to make some distinction between these functions.

The superintendent acts as an executive in all duties he undertakes as the direct agent of the board, the legislative body. He carries out its directions in certain specific things. For instance, under direction of the board he might carry out the purchase of grounds for new schools. This seems to be clearly an act as the chief executive of the schools.

In addition to his executive duties the superintendent has general responsibility for the welfare of the schools. He may decide that a certain school should be reduced from eighth grade to sixth grade status. Such action would usually be initiated by him and although it should be confirmed by his board it would not be in the same classification as the steps he takes at the board's direction. The general responsibility of a superintendent for organization and personnel comes under this division.

The contacts of the schools with the community are becoming immensely important. Schools are changing rapidly in motives and methods and the adult generation is therefore less familiar and even less in sympathy with them. It is the duty of the superintendent to popularize modern education in his community. The actions he takes toward this end come under his publicity functions. Hence, any plans for the carrying out of an American Education Week program would fall in this division.

The Superintendent as Supervisor

As a supervisor the superintendent is responsible for the betterment of teaching. Whatever he does, at first hand or through agents, for better courses of study, better methods and improvement of classification comes under this function. Taking part in principals' meetings should be part of the supervision of the superintendent. Surely we cannot afford to have the supervisory functions of city superintendents take other than first place in the demands on his time and interest.

Yet what is the actual situation? In this paper it is not possible to go into detail as to the findings of the few studies of the allotment of the superintendent's time. It is fair, however, to say that the situation with respect to superintendents parallels that of principals. The pressure of executive duties and the responsibilities of organization crowd out the more important

services. Few superintendents spend as much time in supervision as in executive duties. Where the system is small or the staff not well organized the time devoted to supervisory duties is ridiculously small. In many larger cities the superintendent organizes a staff of supervisors and leaves the problem to them, forgetting that he must be a supervisor of supervisors. It is not possible accurately to estimate the proportion of time spent by superintendents in supervision, but it is probably for most of them much less than one-fourth of the time they devote to the school work.

Should Be Relieved of Detail Work

How can such a situation be changed? First, by a realization of the prime importance of such supervision. It is as much a reflection on a superintendent for principals and supervisors to remain in a system year after year with little or no improvement in their work as it is on a principal when the same situation exists with respect to teachers. Supervision of class teaching even at secondhand is getting at the fundamentally important thing—the child, what he should be taught, how he should be taught. When a superintendent insists that his chief duty is to help to improve teaching he will find more time and will discover more ways of being effective in this part of his duties. Even then he may be overburdened. In this case he must insist that he be freed from details of management that he may accomplish his larger work.

The superintendent has four supervisory functions: the supervision of principals and supervisors, the direction of the course of study, the responsibility for professional advancement and the supervision of classroom teaching. The first is by far the most important. The teacher must be a leader of children, the principal a leader of teachers and the superintendent a leader of principals and supervisors. As has been indicated, most of the superintendent's contacts with classroom teaching must of necessity be secondhand. His influence still may be tremendously powerful if his work as a chief supervisor is effective. This presupposes, of course, an idea of supervision that is not merely inspection but that offers help and leadership in the work of teaching.

A city is not progressive in school affairs unless it has a growing course of study, unless it is studying the content of curricula, improving and experimenting. In many places there are permanent teacher committees, permanent in organization though not in personnel, under leadership of supervisors or directors whose duty it is to study the courses of instruction. In other cities changes

in the courses of study are made by experts who are retained for that purpose. No superintendent would wish to employ either system without himself taking an active part in the work. The direction of the course of study, then, is perhaps second in importance.

Teachers are becoming more professional in their attitude, more alert, more eager to solve the intricate and interesting problems of child study. Never have teachers been more enthusiastic about their work than at present. There are many new tools to work with and education is able to give something of value to each child. Still, with it all so much is yet to be done. Under these conditions teachers are studying their profession as never before. Here is a third large field for the superintendent in the improvement of teaching—the stimulation of professional study.

There remains the original function in supervision—the direct supervision of classroom teachers. It needs no argument to show that class supervision must be carried on largely through contacts with supervisors and principals. Still there is yet a place for classroom visits in the superintendent's program. Superintendents tend to get away from firsthand evaluation of class teaching, from an understanding and a sympathy with class problems. Many a superintendent has spoken glibly of project work at general meetings when in his own system there have been splendid examples of project teaching that he could have observed and reported on. A superintendent should spend some time in class supervision, not merely inspection, and to be of value either to himself or to teachers such supervision must be carefully planned.

The Value of Principals' Meetings

In the superintendent's relation with principals and supervisors his most valuable tool is the principals' meeting. Practice varies as to the holding of such meetings. Some hold a regular weekly session, in other cases meetings are held only on the call of the superintendent. There is also variation in the use of the time. Some superintendents do not seem to realize that their influence on the schools will be exerted more through this session with the secondary executives of the system than in any other way. Such meetings should always be professional, a place for the superintendent to be most of all a head teacher, a place for his leadership to be exerted, for important changes to be proposed, discussed and adopted. Yet matters of petty administrative detail often occupy much of the time. What are proper subjects for discussion at a superintendent's

meeting with principals? Teaching problems of content and method chiefly, and administrative problems that are of major importance. Imagine taking the time of thirty busy principals and supervisors to "page" "Arthur Christoffer-son, eight years old" and get his new address for the attendance department. The telephones and bulletins exist for such items and the meeting of the superintendent's direct subordinates should be used as a real power for better teaching.

How Reports Help

Supervisors and principals in larger cities make many reports in the course of the year. Many of them have a statistical value only, that is, they are needed to keep up the accounts of the schools. Some, however, provide a means of supervision by the superintendent and his staff. For instance, here is a school in a good neighborhood with a young principal, which develops a high truancy rate as indicated by reports. That may not tell the whole story but it may with other reports indicate more to one of the superintendent's staff than would several visits to the school. There may be a need of help from the superintendent in the attendance problem in that school. In the same way reports on the progress of pupils and many other reports can be analyzed in order that the principal or the supervisors may benefit.

Most cities do not definitely rate supervisors and principals in the central office. Even in the few places where this is done there is usually no follow-up. If a principal or supervisor is failing in one respect it is the duty of the superintendent to see whether he cannot be helped. This function of the superintendent as a helper of his principals is little realized in practice.

Test results analyzed may indicate teaching weakness. We know better than to accept such results literally but an opportunity is often lost for a conference with principals as to what seems to be the significance of the results. Conferences with principals on the part of superintendents usually come when forced by some administrative problem. In general practice little use is made of this means of improving the principal's work. In visits to the school the superintendent comes in, greets the principal, asks a few stereotyped questions which happen to occur to him, visits a few classes and departs.

What, then, could he do? Why not telephone in advance that he is coming so that the principal can arrange to be free to spend some time with him? When he arrives, he should take time for a talk in the principal's office. What should he talk about? Here are some questions that might prove valuable. "You have Miss A and Miss B in

your school, both new to the system, what sort of teachers are they? What are you doing to help them become better teachers? What problems are you working on in your supervisory time? What advances do you as principal plan for your school for this school year? What sort of building meetings do you have? What experiments are you carrying out under the course of study?" Then if the superintendent had time the principal could direct him to rooms where there was something particularly worth observing. In much the same way a superintendent could confer with supervisors on the essentials of their work rather than on details of organization.

In the direction of the course of study the superintendent must play a large part. Usually the chairmen of the permanent committees, if there are such, are appointed by him. If the work is to be done by an expert he is responsible for his selection. After changes have been worked out he or his staff must be responsible for revising and approving them.

At general meetings, principals' meetings or grade meetings he can present or can have presented changes or experimental results. Meetings with supervisors on the course of study will help to keep him acquainted with the application of the course throughout the city. A superintendent can no more afford to lose touch with what is being taught in his schools than he can afford to get out of touch with his principals. In the administration of the course of study he is responsible for seeing that the course is followed throughout the system, that there is an opportunity for experimentation under it and that there is machinery provided for its criticism and alteration.

Encouraging Teachers to Study Education

If a superintendent has induced his principals to study education he has already gone far in a program of professional advancement in his system. Through principals' meetings, through general meetings that are addressed by speakers with real messages, through stimulating institute sessions, he can create a body of thinking teachers.

Superintendents' bulletins, which carry out a large part of the routine of administration, can also be utilized for the purpose of helping professional study.

Recognition of professional study through increase in salary or advancement in position is a legitimate part of such a program. Teachers may be encouraged to attend summer sessions or to undertake some study connected with their own problems during the school year. In conference

with individuals or groups the idea of becoming a broader, more intelligent individual, knowing more of life as well as education, may be constantly presented. In all of this program the superintendent must be the leader, a student of education himself, a teacher of teachers.

Finally, what can a busy superintendent in a city system do as a direct supervisor of class teachers? First and most important he meets all of them face to face in general meetings. Here also custom varies. Some cities have such meetings frequently, others rarely. The best plan seems to be to have the superintendent call meetings whenever there is something of professional interest that is worth the time of the entire body. By what he says himself, by what he provides through others, the superintendent may establish his supervisorship over all his teachers.

Visits Superintendents Should Make

There is also an opportunity to help in smaller meetings. In grade gatherings with subject supervisors some superintendents are often present. These offer him an opportunity to hear discussions of class problems, even at times to present his point of view. In small cities with little in the way of a supervisory staff a superintendent may assume leadership in such meetings.

Building visits cannot be used as a supervisory contact with the generality of teachers. Time demands prevent this, and there are others in the system whose responsibility this is. Yet by a number of visits intelligently planned and carried out, a superintendent can learn a great deal about teaching problems in his schools. Most superintendents inspect rather than supervise when they visit classrooms. Some have probably not remained in one classroom as long as five minutes within the last ten years. Visits to classes should be selective and the superintendent should cooperate with the principal in planning them. His impressions and judgment should be given to the principal, seldom to the teacher.

This paper is merely a general survey of the problem based on public school experience. No data are assembled, therefore no conclusions other than the most general are possible. It seems that the time spent in supervision by superintendents is small in proportion to the importance of the work. Other functions have engrossed the energies of most city educational leaders. Many have apparently never analyzed their supervisory duties. No superintendent, no matter what his situation, can afford to neglect his prime function—the supervision of the teaching in his schools.

Preparing the Child to Meet the Demands of the First Grade

The kindergarten is helping to fill the need being felt for a school system that will enable children more readily to pass from their homes into the elementary school year

BY S. M. BROWNELL, PH.D., SUPERINTENDENT OF SCHOOLS, GROSSE POINTE, MICH.

EACH year there are thousands of children who cannot successfully meet the demands of the first grade, into which they are thrust by our compulsory school system. The startling proportion of failures in the first grade, approximately one in every four,¹ provides ample proof to substantiate this assertion. This failure to make the proper adjustment to the demands of school work means hardship to the chil-

dren in starting their educational career. To the administrator it provides the problem of making the first year more efficient in terms of successful adjustment of school and child.

Colleges and secondary schools by means of entrance requirements have tried to eliminate or at least to reduce the number of students poorly prepared for the first year situation. These requirements have been changed from time to time but still remain in some form that excludes those who cannot meet the demands. We are so ac-

¹ Terman, Lewis M., *The Intelligence of School Children*, Houghton Mifflin Co., Boston, p. 42.



These boys and girls of the first grade are busy building and making furniture for a doll's health house.

customed to this idea that the very title of school entrance requirements suggests a barrier.

If we are to accept the modern idea of extending education to more and more pupils, should the elementary school place any barrier at the entrance in the form of requirements? It seems that the emphasis should be shifted. Instead of requiring the pupil to fit himself for the school the school should adapt itself to the needs of the incoming pupil. An institution that requires the attendance of every boy and girl must see that suitable provision for their initial needs is made. Whether this is effected through the present school organization, through changes in it or as the result of the combined efforts of home, school and auxiliary agencies, any forces that aid in this adjustment are helping the elementary school to

meet the entrance requirements imposed upon it by the needs of the children. We shall therefore consider this problem of entrance requirements in terms of adjustment of the elementary school.

The present requirements for entrance to the compulsory system are limited almost entirely to a chronologic age basis. According to the mandatory laws in each state the fitness of a child for the first grade seems legally to be merely a matter of reaching a certain birthday. We know that the same chronologic age does not at all mean equal ability to meet the school situation. Even if it did, we find that the states are not agreed as to which anniversary is the proper one, the age of compulsory entrance ranging from six to nine, as is shown in Table I. Nor do the states agree as to when the school should take note of the child by enrolling him on the school census.

There is need of more than chronologic age to determine the child's fitness for the first grade. As the school system is now organized there is a decided gap between the school and the home, and the home training varies to such a degree that instead of being an asset it may be a handicap to the child as he begins his schooling.

Though the kindergarten is perhaps the best known means of effecting an adjustment between the school and the child, it occupies a far from universal place in our school system. As in the case of compulsory entrance, there is wide variation in its legal standing. In May, 1927, only fifteen of the forty states with kindergarten laws provided equal support for the kindergarten and the elementary school. In nineteen states certain communities only may establish kindergartens as a part of the school system. Among the state laws that deal with this subject, some indicate three, some four, some five, years as the age for kindergarten entrance (Table I).

However, one should not conclude that the schools are reaching beginners only at the ages mentioned by law. States with no kindergarten laws have kindergartens; states with high ages for census and compulsory attendance enroll many children of low age in school. The progressive city is sure to be ahead of the state laws. But we can be sure that in states with high entering age there are children who would benefit from school yet who, because of legal requirements, do not receive educational advantages.



The kindergarten at the Lincoln School, Evanston, Ill., has been decorated to represent a Japanese garden.

The vigorous growth of the kindergarten presents clear evidence that requirements for the first grade are being recognized, that the need is being felt for so fashioning the school system that the children can more readily pass from their homes to the elementary year. In 1920-22 there was reported an increase of 37,800 children in kindergartens distributed over thirty-one states¹—in cities, in towns and in consolidated rural schools.² More than 150 teacher training institutions are found to be offering kindergarten instruction.³ These include normal schools, colleges, universities and city and private institutions, and surveys are found recommending that efforts be made to enroll all children in kindergartens as a preparation for the first grade.

But although growing as we have shown it to be, and the recognized threshold of school life in some parts of the country, the kindergarten is still not a part of the compulsory system. It comes far from reaching any large share of school beginners. Of every 100 who are eligible for kindergarten only nine or ten attend.³ More than this 10 per cent, however, have felt its influence. Through its curriculum, activities and attitudes, it has had marked effect upon the curriculum and the attitude of the children of the early elementary grades.

It is not mere surmise that kindergarten life aids in school adjustment. Investigations have been made to determine whether the child who goes through kindergarten has been aided in the school situation. The findings are that children trained in the kindergarten can make the same progress in the grades as older children not so trained⁴; that intelligence being constant, kindergarten training makes it possible to meet the first grade situation at an earlier age.⁵

In some places, the kindergarten is beginning to base its entrance requirements on some standard other than chronologic age. At Lawrence, Kan., those who show a mental age of five years are admitted. After remaining a minimum time of one semester they may be passed to the first grade if in the judgment of the kindergarten

teacher and the examiner they show the proper social development, are physically strong and robust and show a mental age of six. They may remain in the kindergarten the entire year or longer. In Kalamazoo, Mich., a child may enter kindergarten at four and one-half years, and the first grade before six, if the results of the Detroit



Twin storks guard the orchestra stage in this kindergarten in the Horace Mann School, Oak Park, Ill.

First Grade Classification Test, the physical examination and the teachers' judgment are favorable. On the basis of these criteria each child is placed in the fast, moderate or slow group.

It should not be forgotten that the kindergarten was the first "visiting teacher" in the public schools. While double sessions in many schools practically eliminate opportunity for much home visitation, home contact is not lost sight of in all schools. Mothers' meetings for conference in regard to home and school problems, and daily

¹ Biennial Survey of Education, 1920-22, Vol. 1, Department of the Interior, Bureau of Education, Washington, D. C., p. 389.

² Carney, Mable, Taking the Farm Child to Kindergarten, Kindergarten and First Grade, October, 1924, pp. 7 and 8.

³ Gesell, A., The Nursery School Movement, School and Society, November 22, 1924, p. 649.

⁴ Peters, W. J., The Progress of Kindergarten Pupils in the Elementary Grades, Journal of Educational Research, February, 1923, p. 117.

⁵ Smith, Coleen M., A Study to Determine the Effectiveness of Kindergarten Training, Elementary School Journal, February, 1925, p. 451.

TABLE I—LEGAL PROVISIONS FOR KINDERGARTEN AND SCHOOL ENTRANCE, 1927, SHOWING AGE FOR SCHOOL CENSUS (SC), FREE ATTENDANCE AGE (FA), COMPULSORY ATTENDANCE AGE (CA), AND KINDERGARTEN AGE (KA). IN ADDITION IS PROVIDED INFORMATION REGARDING STATE LAWS RELATIVE TO THE COMPULSORY ESTABLISHMENT OF KINDERGARTENS AND PROVISIONS REQUIRED FOR KINDERGARTEN ENTRANCE OTHER THAN ATTAINMENT OF A CERTAIN CHRONOLOGIC AGE

State	Legal Age for—				Comp. Kgn.?	Req. Other Than Age?
	S.C	F.A.	C.A.	K.A.		
Alabama	7	6	8	5	No	No
Arizona	a	6	8	4	b	b
Arkansas	6	6	7	a	No	a
California	c	6	8	4½	No	No
Colorado	6+	6	6	3	No	No
Connecticut	4	6	7	4	No	No
District of Columbia	5	6	7	a	No	No
Delaware	6	5	7	5	No	No
Florida	6	6	7	a	No	No
Georgia	6	6	8	d	No	No
Idaho	6	6	8	3	No	No
Illinois	7	6	7	4	No	No
Indiana	6	5	7	a	No	No
Iowa	5	5	7	5	No	No
Kansas	5	5	8	4	Yes (e)	No
Kentucky	6	6	7	a	No	No
Louisiana	a	6	7	4	b	b
Maine	5	5	7	4	Yes (e)	No
Maryland	5	6	7	b	No	b
Massachusetts	5	5	7	b	No	b
Michigan	5	5	7	4	No	No
Minnesota	6	6	8	4	No	No
Mississippi	5	5	7	5	No	No
Missouri	6	6	7	d	No	No
Montana	6	6	8	d	No	No
Nebraska	5	5	7	d	No	d
Nevada	6	a	7	4	b	b
New Hampshire	5	5	8	a	No	No
New Jersey	5	5	7	4	No	No
New Mexico	5	5	6	4	No	No
New York	Birth	6	7	4	No	No
North Carolina	6	6	7	e	No	No
North Dakota	6	6	7	4	No	No
Ohio	5	6	6	4	b	b
Oklahoma	6	6	8	4	No	No
Oregon	4	6	9	a	No	No
Pennsylvania	6	6	8	4	No	No (g)
Rhode Island	4	a	7	a	No	a
South Carolina	6	6	6	c	No	No
South Dakota	6	6	8	a	No	No
Tennessee	6	6	7	a	No	No (h)
Texas	7	7	8	a	No	No
Utah	6	6	8	4	No	No
Vermont	6	6	8	a	No	No
Virginia	7	6	7	a	No	No
Washington	4	6	8	5	No	No (i)
West Virginia	6	6	7	4	No	No
Wisconsin	4	4	7	4	No	No
Wyoming	6	Kgn. Age	7	a	No	No

a—No mention in school laws.

b—Data not available.

c—No school census. Bill before legislature providing for registration of minors between 3 and 18.

d—No law relating to the establishment of kindergartens.

e—Compulsory upon petition by parents.

f—Each school makes its own requirements.

g—It is the duty of school directors to assign to special schools or classes physically or mentally handicapped children who cannot profit from instruction in the usual type of public school.

h—There must be separate schools for white and colored children.

i—Defectives may be excluded to be cared for by special institutions.

child study charts kept by the teacher aid both parent and teacher in following and guiding the child's growth, both in and out of school. "The kindergarten recognizes the immense importance in habit formation of securing the interest and intelligent cooperation of the parents."¹

It has been pointed out by Franzen² that one

of the first things to be considered in a kindergarten testing program is the needs for entrance to the first grade. Should motor control, social habits, personality traits, intellectual development or a combination of these be used as criteria? What standard should be used to test the level of proficiency reached? These and other

¹ Hill, Patty S., et al, *A Conduct Curriculum*, p. 122.

² Franzen, R. H., *Testing Little Children, Kindergarten and First Grade*, April, 1924, p. 137.



A fireplace and a fully equipped playhouse feature the kindergarten of Monroe Elementary School, Hinsdale, Ill.

questions vitally affect any testing program. While at present we may have fairly unsatisfactory answers to these questions, yet undoubtedly it will not be long until acceptable ones can be obtained. Groups of children can be given developmental tests, such as are being worked out by Doctor Gesell. They can also be given medical and psychologic examinations before and during the kindergarten period and during their first year in the grades. With the results of these tests and a knowledge of success in the school situation, the needs for the success in first grade work can

information with the child, when he is ready for the first grade, in the form of permanent personal records that will be invaluable to his next teacher.

The kindergarten also needs to extend its influence to the home. Home visitation should be a part of the kindergarten teacher's work, and mothers should visit the kindergarten when possible. Working with agencies concerned with the study of child rearing problems, such as visiting nurses, child welfare centers and baby clinics, the kindergarten may extend its influence into the community. The value of this cooperation

TABLE II—SUMMARY OF DATA PRESENTED IN TABLE I SHOWING THE LEGAL AGE REQUIREMENTS OF STATES RELATING TO THE SCHOOL ENTRANCE PERIOD

Age for:	Number of States Designating Age Listed Below										Total
	Birth	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	7 yr.	8 yr.	9 yr.	
School Census	1	..	..	..	5	13	23	4	..	..	49
Free Attendance .....	..	..	..	..	1	12	32	1	..	..	49
Compulsory Attendance ....	..	..	..	..	..	..	4	28	16	1	49
Kindergarten .....	..	..	..	2	19	5	..	..	..	..	49

Note: The information for Tables I and II was compiled as a result of examination of the available copies of laws relating to education and revision in the light of replies from commissioners of education in each state as to the legal requirements on the points here presented. The information from the state commissioners was obtained in April, 1927.

be determined and the work carefully planned.

As a flexible institution the possibilities of the kindergarten are almost unlimited. It should get in touch with all children at the age of four or thereabouts. Through its study of the child, as a result of tests and observations, it should pass on

can hardly be overstressed, for by avoiding duplication of effort and by using the help available, more effective contact with many more homes can be secured. This points to the need of a flexible kindergarten interested in the mental hygiene of the child.

Extending the High School Pupil's Range of General Information

Results of intelligence tests of college freshmen reveal a compelling need for secondary teachers to concentrate on giving their pupils general as well as specific knowledge

BY E. V. HOLLIS, STATE TEACHERS COLLEGE, MOREHEAD, KY.

A STUDENT'S progress in college is probably determined as much by the range and depth of information that constitutes his cultural background as it is by his intelligence, his ability to read or his earnestness. Do high school graduates have this range of information and the vocabulary necessary for successfully pursuing college courses? Can the freshman who has only the amount and range of information that is standard for seventh and eighth grade pupils assimilate the complex facts and relations that are presented to him in his courses?

As a partial answer to these questions, this paper reports a sample of the general information of entering college freshmen at the State Teachers College, Morehead, Ky., as it is revealed

by the general information sections of the Army Alpha Intelligence Test and the Thorndike Intelligence Examination. In addition to calling attention to the importance of the problem the discussion proposes two ways for attempting to remedy the situation that is outlined.

What the Army Test Revealed

As a first step in getting a composite picture of the general information of entering freshmen the answers of 638 such students to the general information section of the Army Alpha Intelligence Test were synthesized. The forty questions of this test include material from school and from the affairs of the workaday world. The type and difficulty of the questions, as well as the amount

TABLE I—PERCENTAGE OF CORRECT, INCORRECT AND NOT ATTEMPTED RESPONSES OF 638 FRESHMEN TO FIFTEEN QUESTIONS OF SECTION 8 OF THE ARMY ALPHA INTELLIGENCE TEST

Questions	Per Cent Correct	Per Cent Incorrect	Per Cent Not Attempted
1. Boston is in Connecticut, Rhode Island, Maine, Massachusetts.	93.6	6.4	0.0
2. Shoes are made by Swift & Co., Smith & Wesson, W. L. Douglas, Babbitt Company	82.1	16.6	1.3
3. The artichoke is a vegetable, fish, lizard, snake	73.5	25.5	1.0
4. Yale University is at New Haven, Annapolis, Ithaca, Cambridge	23.0	70.7	6.3
5. Tokio is a city of India, China, Japan	26.0	67.0	7.0
6. The thyroid is in the shoulder, neck, head, abdomen	55.3	27.2	17.5
7. The cutlass is a kind of sword, musket, cannon, pistol	46.0	37.9	16.1
8. The Corona is a kind of phonograph, adding machine, typewriter	51.4	40.1	9.5
9. The author of "The Scarlet Letter" is Hawthorne, Poe, Stevenson, Kipling	42.7	20.3	37.0
10. John Wesley was most famous in literature, science, war, religion	39.8	23.0	37.2
11. Darwin was most famous in literature, science, war, politics.	41.2	22.1	36.7
12. Falstaff appears in Romola, Vanity Fair, Oliver Twist, Henry IV	18.8	30.2	51.0
13. The number of a Korean's legs is two, four, six, eight	30.0	34.5	35.5
14. The Battle of Lexington was fought in 1620, 1775, 1812, 1864.	29.6	18.5	51.9
15. An eight-sided figure is called a trapezium, scholium, parallelogram, octagon	30.0	21.3	48.7
Average of the percentages	45.3	31.0	23.7

of information concerning them that was possessed by this group of freshmen, are rather well shown in Table I, which is a random sample of fifteen of the forty questions composing the test.

It is believed that even the average layman would agree that such information as is called for in the above tabulation might be expected to be in the possession of college freshmen with an accuracy of about 90 per cent. Instead we find that 23.7 per cent of this group of 638 freshmen do not attempt to answer them; that 31 per cent of the group do attempt them but give erroneous answers and that only 45.3 per cent of this group of students have the information necessary to answer these simple questions. Approximately one-third of the group do not know the number of a Korean's legs, nor what an artichoke is, nor what a cutlass looks like; in fact, if to this group is added the number who did not attempt these problems considerably more than half of the group did not have this information. The completed tabulation for the entire forty questions reveals essentially the same picture as is given by the fifteen questions for which the figures are shown.

Second Test Substantiates the First

As a check on the findings from the Army Alpha Test, and for a further exploration into the general information of freshmen, the general information section of the Thorndike Intelligence Examination of 242 freshmen was analyzed. The eighty questions constituting this section of the test can practically all be grouped into subject matter information that the student likely has studied in his elementary and high school career. For example, four questions refer to mathematics, twenty-three to sciences, five to English literature and twenty to history and civics. Eight questions demand a knowledge of geography, five questions each relate to economics and music, and ten questions call for knowledge of a mechanical nature. The answers to these questions are tabulated under the suggested curricular subject headings in a manner to show the percentage of correct information, the percentage of incorrect information and the percentage of the group that did not even attempt an answer. Keeping in mind that the amount of information asked for under each subject heading varies, one may glimpse something of the effectiveness of the school subjects as sources of general information for freshmen.

For example, the responses to statements calling for information on twenty-three items from the sciences were 35.5 per cent correct, 20.8 per cent incorrect and 43.7 per cent not attempted.

When the entire eighty questions are considered, only one-third were correctly answered, one-fourth of them definitely missed and two-fifths of them presumably so unknown as not even to be attempted. The second and third columns of the table give a much more accurate picture than does the fourth column because we cannot know whether a student omitted an answer for a lack of information or for a lack of time. It is, however, highly significant to notice the percentage the correct responses are of the total percentage attempted—only 57 per cent of the questions attempted by the group were answered correctly. Again we find the general information of college freshmen on a level with that of elementary pupils.

How Junior High School Pupils Rank

Norms for freshmen are not available for the general information section of either the Army Alpha Test or the Thorndike Examination. Therefore one cannot say what percentage of the information called for might reasonably be expected of the freshmen of this study. It is significant to know that when I gave the Army Alpha material, under the same conditions of administering and scoring, to 120 pupils in the seventh, eighth and ninth grades, their percentage of correct responses was higher than the responses of the groups of college freshmen. Table III gives the comparison.

It is true that 120 junior high school pupils is too small a number for the mean of their achievement to constitute a significant norm for purposes of comparison. Yet, in the absence of a more valid standard, one wonders why the difference is in favor of this younger group of pupils.

Explaining the Rating of the Freshmen

Could differences in the intelligence of the two groups account for the lower rating of the college freshmen? Were the freshmen not greatly below the intelligence level of their group throughout the country? Does intelligence correlate highly with general information? The I.Q. of the freshman group was approximately 103 as measured by the Army Alpha Test, and the I.Q. of the junior high school group was approximately 110 as computed from three different intelligence tests. There is hardly enough difference in intelligence to account for the difference in score, when the freshmen had the advantage of three to five years more exposure to the general information of the schools and of the world at large. It is true that the freshmen we are considering were somewhat below the median for

freshmen at large who have taken the Army Alpha test. The median score of Morehead freshmen was 109, while the median score of 3,310 freshmen from different parts of the country was 129.

Is the Quality of Instruction to Blame?

One would be inclined to believe that this fact accounts for the poor showing of the freshmen, were it not that there was little relation between the intelligence test ratings of these students and their range and depth of general information. In fact, when we eliminate the upper and lower 8 per cent of the students according to their intelligence rankings, we can say there is no significant relation between ability and general information. As many students made high ratings on general information who had an Army Alpha raw score of 75 as did those from the group with a raw score of 135. These findings led one to conclude that the most important cause of the inadequate information of freshmen is not the

TABLE II—PERCENTAGE OF CORRECT, INCORRECT AND NOT ATTEMPTED RESPONSES OF 242 FRESHMEN TO EIGHTY QUESTIONS OF THE THORNDIKE INTELLIGENCE EXAMINATION, GROUPED INTO CURRICULAR SUBJECTS

Subject	Per Cent Correct	Per Cent Incorrect	Per Cent Not Attempted
Mathematics .	40.4	22.3	37.3
Geography ..	43.6	27.1	29.3
Literature ...	37.0	12.7	50.3
Sciences	35.5	20.8	43.7
Music	34.1	19.9	46.0
Civics	30.1	27.2	42.7
History	29.0	21.3	49.7
Mechanical ..	27.7	30.3	42.0
Economics ...	25.0	43.2	31.7
Average of the percentages.	33.5	25.5	41.0

result of intelligence factors but of other causes.

Since the lack of information is shown to exist and since intelligence is probably not among the most important causes of this deficiency, one may hazard the guess that the condition is largely due to the type and quality of instruction in the secondary school and to the meager cultural background that the average high school pupil builds for himself. Regardless of the cause, can it be said that the situation is local and, therefore, without general application in other colleges and high schools of the country? That a decidedly more favorable situation exists throughout the country than is described in this paper is more a matter of hope than of evidence. At least, Van

Wagenen¹, Pressey² and Dryden³ offer evidence that the problem exists at the University of Minnesota, Ohio State University and the University of Southern California.

What is the significance of the problem to high school and college instructors? Does it mean that pupils are failing to broaden, deepen and increase the range of their informational concepts during

TABLE III—COMPARISON OF TWO GROUPS ON THE GENERAL INFORMATION SECTION OF ARMY ALPHA INTELLIGENCE EXAMINATIONS

	Per Cent Correct	Per Cent Incorrect	Per Cent Not Attempted
Junior high school group	51.6	32.5	15.9
College freshman group.	45.3	31.0	23.7

the high school years? Does it mean that instructors of college freshmen can safely assume informational ideas only on the level expected of good eighth grade pupils? So far as the evidence of this paper goes, an affirmative answer is indicated to both of these questions. The high school teacher can help to remedy such situations by providing class exercises that require the revision and broadening of information acquired in the elementary school likely to be of value in high school and college work and in the affairs of intelligent citizens. By well planned instruction he can successfully extend the pupil's range of information.

The Task of College Instructors

Until the situation is remedied in the secondary schools, college instructors of freshmen must make a careful check to see that such simple terminology of their courses as pound, rod, gallon, enamel, glade, norm, barometer and chronological are really known. If the instructor will submit to his class tests for fifty of its simple terms and fifty items of general information about the subject that he believes they know, the answers will likely prove a revelation to him. After such an experiment the average instructor will become so painfully aware of the decided limitations to the information and vocabulary of his group that he will be more than anxious to begin a more efficient and agreeable type of instruction for his pupils.

¹ Van Wagenen, M. J., *The College Freshman's Range of Information in the Social Science*, The School Review, Vol. XXXV, January, 1927, pp. 32-44.

² Pressey, S. L., *et al*, *Research Adventures in University Teaching*, pp. 100-106, Public School Publishing Company, Bloomington, Ill., 1927.

³ Dryden, J. H., *A Study of the General Information of Entrants*, an Unpublished Thesis at the University of Southern California, 1928.

The Who, What and How of the School Health Program*

The future well-being of high school pupils depends upon the right health instruction and upon a sensible and scientific supervision of their physical activities

By CHARLES H. KEENE M.D., PROFESSOR OF HYGIENE, UNIVERSITY OF BUFFALO

SECOND-ary schools are either the upper four grades of the twelve-year public school course, or the upper six grades. In the latter case, these grades are usually divided into a three-year junior high school and a three-year senior high school. As the six-year secondary school organization is increasingly prevalent, we shall discuss the health program preeminently from that viewpoint.

More emphasis is needed upon the health factor in high schools. The number of pupils in them has increased enormously in the last ten years. In most communities the number of high school pupils in that time has doubled. In many places it has quadrupled. This has meant an increase in the number of years the average child spends in school.

The complexity of the program has made necessary a considerable addition to the length of the school day. Frequently the buildings are overcrowded. This overcrowding, the large number of courses offered, the increased length of the



Story plays and song plays may be made a definite and attractive part of the physical education program.

or the supervision of any school program, three factors must be kept in mind: Whom are we going to teach? What are we going to teach? How are we going to teach it? These become basic considerations of outstanding importance when we are about to plan the school's health program.

Adolescent boys and girls are those whom we shall teach. They range in age from eleven to twenty-two years, with most of them, however, falling in the age group of thirteen to nineteen years. These are mostly pupils who have recently gone through the puberal change. They are exhibiting the characteristics of early adolescence—intense interest and enthusiasm, excitability, argumentativeness and an enormous interest in sex

school day and the number of social activities the schools have taken upon themselves have increased enormously the rush, excitement and strain of high school life. In addition, the equipment used has become complicated, and much of it, particularly that used in the physical education program, needs intensive supervision of its sanitary condition.

In a discussion of the teaching, the administration

*Read before the joint session of the child hygiene section of the American Public Health Association and of the American Association of School Physicians, Minneapolis, Minn.



Hiking and nature study are an ideal combination of a health activity and an academic study. Contact with the outdoors enriches the pupil's personality and tends to develop poise and self-reliance.

matters. On the physical side they are going or recently have gone through a rapid increase in stature and in the size of the vital organs, particularly the heart. These things mean great danger of strain, mentally and physically. School programs should be kept simple, and any physical contests must be kept well within the power of the enlarged heart which has not yet acquired endurance.

What are we going to teach? Sanitation of buildings and the provision of factors for health activities; a hygienic arrangement of the school program as to hours and studies; health training and instruction suited to the age, needs and growing responsibilities of adolescents; a physical education program that shall create both desire and opportunity for a sufficient amount of the right kind of physical activity daily, given under suitable conditions; health supervision—a coordinating force—detecting and removing physical handicaps, protecting from communicable disease, preventing mental or physical overstrain and guiding into healthful channels the activities of classroom teachers and special teachers of health and physical activities, including athletic sports and competitions.

How are we going to teach the lessons of health? The health factors in the sanitation of the school plant include not only such general matters as heating and ventilating, lighting and eye conservation, seating and toilet facilities, but also special provisions which are essential if an adequate health program is to function. These include adequate gymnasiums with such accessories as lockers and showers; swimming pools with similar adjuncts; a cleanly administered cafeteria providing a suitable diet; an auditorium; a health room for the care of emergencies and as a workshop for physicians, nurses and the dental staff.

Aims of Health Training and Instruction

The school day is made safe only by a hygienic arrangement of the school program. Within the last twenty years, almost everywhere, the length of the secondary school day has been increased from four and one-half or five hours up to six or seven hours. This frequently means a school day beginning at 8:30 a.m. and continuing until 3 p.m., with approximately forty minutes for luncheon in the school cafeteria. In most cases the length of the class period is from forty-five to sixty minutes. Between periods, pupils move from one classroom to another. This is a desirable change, as it gives relief from sitting, quietness and discipline. Fortunately, the variety of subjects offered gives change from semester to

semester and from year to year. The introduction of physical education into secondary schools has come opportunely to give relief during the longer school day. Leading authorities on education now maintain that in the high school program there should be provision for at least one period a day for health and physical activities, four of these to be used for physical activities and the fifth for health training and instruction, commonly designated hygiene.¹

This health training and instruction has the following aims: the establishment of good health habits; enough theoretical instruction so that pupils may know why good habits relating to cleanliness, fresh air and sunshine, sleep, food, play and exercise and the avoidance of communicable diseases are desirable; the instilling of ideals concerning health and physical fitness; the building of proper attitudes concerning the responsibility of the individual, not only for his own health but for the health of family, school and community.

Planning a Helpful Program

Great progress has been made recently in health training.² We are approaching our goal of teaching health rather than merely teaching about health. Individual health depends largely on education. Health training and instruction, if it is to be successful, must be graded so that its content may be suited to the age and environment of the pupil. Its first aim is to establish right habits. To be successful, all departments in a secondary school should contribute to the correlation of health teaching and activities with such other school factors as English, history, chemistry, physics, biology, art and the manual trades. Correlation with the health phases of community life is important. Field trips to dairies, markets, bakeries, factories, mills, shipyards and other industries are important if pupils are to get a definite idea of the health factors in community life and work.

One hour a week throughout the high school career should be allotted to health training and instruction. This time allotment is not sufficient, however, unless there is this definite correlation of other school subjects with the health training program. Credit for work done should be granted in this subject just as much as in English, the classics or mathematics.

Mental hygiene must be emphasized. Cheerful home and school surroundings, are essential. A nagging, waspish teacher, a scolding mother or an irritable father may do serious harm. At

¹ Sixth Year Book, p. 460, Department of Superintendence, National Education Association, Washington, D. C.

² Courses of Study in School Health, Hygiene and Physiology, Grades IX-XII, State Department of Public Instruction, Harrisburg, Pa.



Gymnasium exercises of all kinds add to the diversity of health training activities.

every cost, we must foster this unfolding mental and physical life. Control and guidance of this phase of development, evidenced by rapid physical growth, expanding, searching intellect, quickened emotional life and desire for society and its excitements, have a marked effect in forming and deepening the moral and spiritual sides of adolescents. These problems are so complex that it is essential that a clinical psychologist and psychiatrist be employed by the board of education.

We Should Teach Positive Health

Our major program should be not to give information concerning disease but to build and inform as to health. Not only must we inform concerning the health of the individual but concerning that of the home and of industry. Closely allied to this is instruction concerning sex hygiene, "In the secondary schools this teaching can be done effectively through the regular hygiene classes, and through correlation with other subjects in the program of studies. The school physician, the school nurse and the instructor in

physical education have peculiar opportunities to accomplish very beneficial results. A close alignment is necessary, also, with the various sciences, particularly with biology."¹ So far as possible such instruction should be given to individuals rather than to groups. A section on tuberculosis and one each on narcotics and drugs, on tobacco and on alcohol are absolutely necessary and, in many states, are required by law.

A varied and intensive program in physical education is an essential health element. In it should be included all the physical activities it is possible properly to teach. Marching, calisthenics, gymnasium exercises on apparatus, story plays and song plays, folk and esthetic dancing and a multiplicity of team games and athletics should be included. Special effort should be made to give each pupil definite instructions in recreational games so that he may leave the secondary school prepared to participate in at least two forms of such games safely and with pleasure. These should be games that require little time

¹ Sixth Year Book, p. 475, Department of Superintendence, National Education Association, Washington, D. C.

or space and are readily adapted to congested city districts as well as rural neighborhoods, that can be played by from two to four contestants, that do not require long drill and training in team games and that can be modified to the individual's power and endurance. Lawn (and paddle) tennis, squash, handball, boxing, wrestling, swimming, skating and volley ball are useful games.

The factors used in physical education require special and intensive sanitary supervision. Lockers, shower baths and swimming pools all may spread disease if pupils and premises are not adequately supervised and cared for. With adequate supervision any of these may be made absolutely sanitarily safe.

On the more distinctly medical side—that

phase of the school program which I think of as health supervision—we find the keystone of the whole program. Its aim is prevention rather than mere diagnosis or even treatment. Its content includes the control of communicable disease by means of frequent sanitary and pupil inspection, and intensive cooperation with teacher, pupil and family. Included in this are investigation as to vaccinations—required by law in most states—the presence of skin disease, particularly the ringworm of the feet which is so prevalent where gymnasium accessories are not adequately cared for, and repeated individual and classroom inspection for the arrest of communicable systemic diseases.

A thorough annual physical examination should

For those skeptical pupils who may doubt the germ theory, a session in the laboratory will be effective in implanting cleanliness ideas in their minds.



be required. During and following this, not only the removal of physical defects but the importance of health habits and their possibilities should be emphasized to pupil, teacher and parent. In these examinations, school physician, school nurse, dentist, dental hygienist, and psychologist should participate.

The Physician and His Duties

Health supervision should have a much more active and controlling part in the physical education section of the health program than it usually does. The advice of the school physician should be a controlling factor as to the number and kind of activities in which pupils may participate. As physicians, most of us have erred in being too ready to excuse physically handicapped pupils from required programs in physical education. I cannot emphasize too heartily the fact that, for practically any pupil who is physically fit to be in school at all, there is some phase of the school program in physical education in which he may safely and profitably participate. What this should be, however, the school physician should decide, basing his opinion on the needs and abilities of the individual, upon an intensive study of the various elements in the physical education program and upon the way in which those are handled and supervised.

No pupil should be allowed to participate in such severe team games as football and basketball or in such strenuous activities as competitive rowing or swimming or track athletics, unless he is examined and pronounced fit by the school physician immediately preceding the season of the particular sport.

For the sanitary condition of gymnasiums, lockers, showers, swimming pools and the like, the school physician should hold himself more directly responsible than he now does. Health supervision, too, includes careful supervision of the sanitary conditions of the cafeteria, its kitchen, those who prepare and serve the food and the type and amount of diet offered.

The Health Staff

In the hygiene teaching phase of the program, the school physician should not only advise nurses, teachers or specialists who are giving instruction in this subject, but there are certain phases of it he might well teach himself.

These things cannot be done without adequate and properly trained personnel. A school physician should be assigned to a high school on the basis of at least one hour of time each school day for each 2,000 pupils enrolled and one school nurse on the basis of one hour each

school day for each 1,000 pupils enrolled. The nurse assists the physician in his efforts to control communicable disease. She is present at all physical examinations of girls, and she is a definite help in taking care of those who may be acutely ill during school hours, or who meet with accidents in any part of the school program. She, as well as the physician, should hold frequent conferences with pupils, teachers and parents concerning the physical condition of individual pupils. The dental staff, including a dentist and a dental hygienist, is used largely for advisory purposes among pupils of high school age. If the dental program is adequately organized and carried on in the lower six grades, there is little need for the work of these specialists in the upper six.

The physical education program needs either one or two versatile instructors in the smaller high schools, or a considerable number of more specialized instructors in the larger high schools. Roughly speaking, they have to cover such activities as gymnasium work, swimming, intramural sports and competitive team games and athletics of interscholastic type. There should be men teachers for the boys and women teachers for the girls, one for each 300 pupils.

In a school having a cafeteria, expert advice and administration by a trained dietitian are essential.

Protecting the Adolescent

In health training and instruction, the teaching may be done by various trained persons, such as a teacher in biology, one in home economics or by the physical education instructors. Frequently these latter are the only persons on the school staff, except the school physician and the school nurse, who have enough knowledge of basic anatomical and physiological facts to give wise health training and instruction. In a large high school the tendency toward departmental organization frequently results in the employment of a special teacher who teaches nothing but hygiene.

In these factors, all personalities work together to guide, guard and build the health of the adolescent. He needs such protection. While many schools now have most of these factors, they are usually independently handled, and have little correlation or cooperation with each other. Sometimes distinct antagonism between these personalities exist. For success, intensive correlation and cooperation, preferably under someone on the school faculty who shall act as head of health and physical education and control all of these factors, are essential to safety and progress.

Providing Educational Guidance in High Schools and Colleges

Because of the great increase in school enrollment since the World War a new form of articulation between high schools and institutions of higher learning seems necessary

BY WILLIAM R. SMITHEY, PROFESSOR OF SECONDARY EDUCATION, UNIVERSITY OF VIRGINIA

THE American high school and the American college are faced with a new problem, the roots of which lie in the fact that since the World War enrollment in both of these institutions has shown a great increase, thus straining the relationship between them so that a new form of articulation seems to be necessary.

In this paper I shall endeavor to set forth the conditions that now exist with reference to the preparation of students for institutions of higher learning and with reference to the control and guidance of such students after they have been received into these institutions. I shall also attempt to indicate the guidance that is necessary during the secondary school career to enable the student who decides, on the basis of his intellectual interests, to go to college, to qualify for the institution that offers the curriculum he desires.

The American secondary school, emancipated from the dominance of the college, has assumed the obligation placed upon it by its increased heterogeneous enrollment. Actuated by the desire to adjust its program to meet the needs of the greatly increased pupil population and controlled, in some measure at least, by the professional spirit, the high school is becoming self-reliant and efficient. It no longer looks to the college for guidance and advice. It is solving its own problems in cooperation with departments of education with a seriousness and efficiency that come with the realization of the demands that modern society has placed upon it. It now has the courage to provide and to administer programs of studies in terms of definite objectives and functions.

What Is Secondary Education?

The field of secondary education is perhaps wider than that of the college. The junior high school movement places the beginning of secondary education in the seventh grade and the junior college movement places the first two years of the traditional four-year college in the hands of

the secondary school. Preparation for institutions of higher learning has become only one of the objectives of the secondary school. This institution now provides terminal education for those who cannot or perhaps should not go on to higher levels of training. The modern secondary school is now a "finishing" school as well as a "fitting" school. Moreover, the secondary school is saying that the college "having accepted high school students on the basis of graduation from a public or private high school shall assume responsibility for them," and that "the college records of a particular high school operate only as one factor in the accrediting of the high school by the state board of education."

How the School Guides the Pupil

In order to provide real educational opportunities for its heterogeneous school population on the basis of abilities, interest and aptitudes, the high school now regards guidance as one of its principal functions. The object of such guidance is to cause pupils, by means of courses that are both exploratory and revealing and by means of personal counsel based upon all the needs that arise in the life of the school and community, to choose curricula that will prepare them for advanced study or for occupations that offer opportunities for happiness and success. The school thus assumes definite obligations to aid the pupil to make the most of his life. To do this it endeavors to strengthen him most at the points where he is already strongest and to aid him, in terms of his demonstrated ability, interests, aptitudes and industry, to choose the advanced work or the vocation that gives promise of most success and happiness for him.

If this choice calls for advanced study he will need assistance in the selection of the institution in which he will get this advanced training. If, however, the pupil decides in favor of some occupation at or before the end of his high school course, he will need help in preparing himself for that work for which, apparently, he is best

fitted. High school guidance is a unitary function. Guidance does more than aid the pupil in the choice of a vocation, it is concerned with the whole field of his development.

The secondary school has not as yet experience enough to discharge in an effective manner this guidance function. It is, however, conscious of its obligation and is now endeavoring to discover, by controlled experimentation, effective means of inaugurating and administering a guidance program. The high schools of Oakland, Calif., Providence, R. I., Detroit, Rochester, N. Y., Philadelphia and Spokane, Wash., have inaugurated significant guidance programs. Most of the efficient American high schools are planning guidance programs in order to adjust the work of the secondary school to the needs of the high school pupil.

Colleges Must Meet a New Situation

These endeavors have originated for the most part within the high school itself, but it is now becoming clear that the high school cannot solve this guidance problem without the cooperation of the college as well as that of the parents. There is an increasing body of evidence to show that this problem affects the college in a vital way and is connected with the whole question of high school and college articulation.

Guidance has become as necessary for the college as for the secondary school. The enormous increase in the number of students desiring and demanding higher education has given rise to many important and difficult problems in our institutions of higher learning, particularly in our state institutions. It is becoming particularly difficult for such institutions to adjust their programs to this new situation. The increased enrollments necessitate additional physical equipment, an enlarged teaching staff, a more flexible program of studies, new machinery for the induction of freshmen into the life and work of the college, a changed attitude toward the admission of students and a host of internal problems concerned with student life in general. No longer does the college have to bid for students, they come in ever increasing numbers despite the barriers that are being put up. The college is now faced with the problems of limiting the number of students and of caring for those who enter. The solution of these problems is forcing upon the college some form of effective educational guidance which it is now apparent should start in the secondary school and continue through the college period.

For many years both public and private institutions of higher learning have been working on

these two problems more or less independently, many of them conducting constructive experimentation along these lines. The whole question as to who should go to college is being seriously considered by college authorities. There are two opposing schools of thought in regard to this question. One school holds "that the function of the college being to raise up a race of intellectual leaders, college entrance requirements should be highly selective;" the other maintains "that in a democracy the chief duty of the college is to train for useful and intellectual citizenship the largest possible number of young men and women." The former view seems to have the support of the more strongly endowed colleges, while the latter view seems to be the one most commonly recognized by the public institutions. Some hold that in the future we shall witness a parallel development of two types of higher institutions, the one operating on a highly selective basis and the other operating on the concept that admission to college should be based upon high school graduation. In either case the college will need a guidance program.

In the past few years colleges have adopted many new procedures for the selection of students. Some, like Harvard, Dartmouth and Rhode Island State College are arbitrarily limiting the number admitted to college, the basis for selection in most cases being relative standing in high school. Other criteria for the selection of students which are placing college admission on a competitive basis are: college qualifying examinations; psychological examinations; comprehensive examinations; enforcement of higher standards for entrance; institutional accrediting; grade requirements for both admission and progress, and personality ratings.

Providing for the Freshmen

The large percentage of students who drop out of college during the first two years is another problem that has forced itself upon the attention of college authorities. Freshman Week, the creation of the office of dean of freshmen, special groups of advisers for freshmen, orientation courses, X. Y. Z. grouping of students and housing freshmen in special dormitories are some of the most significant measures that have been introduced to cope with the high rate of student mortality. The colleges have not only become conscious of the guidance problem but are attempting to build their program around it. This program is not content with schemes of admission either for the limitation of students or for the securing of better grades of students.

It is now fairly well agreed that college stu-

dents, however they may be selected, need careful guidance after they have been received on the college campus. The idea back of Freshman Week is the orientation of students to the life, work and opportunities of the college. Colleges also have become conscious of their problems with reference to their gifted students. Swarthmore College, Swarthmore, Pa., first established honors courses for such students, and many institutions of higher learning now provide similar courses. The new Experimental College at the University of Wisconsin, inaugurated by President Frank, the purpose of which is to discover new means for improving instruction for freshmen and sophomores, is an indication of the need for better guidance of college students.

Courses for Teachers Are Needed

Significant also are the endeavors to improve college teaching. It has long been claimed that poor teaching is characteristic of college institutions. Many colleges are now endeavoring to improve the quality of their instruction, and much research work is being done in universities to improve methods of teaching. The University of Chicago, the University of Akron, and the State University of Iowa have done research along these lines. Doctor Pressey of Ohio State University has recently written a book entitled, "Research Adventures in University Teaching," which contains many practical suggestions for the professor who is interested in the improvement of college teaching. Moreover, there seems to be a demand for courses directed toward the preparation of college teachers. Such courses now offered in many of our leading colleges and universities are designed not only for graduate students preparing for college teaching but also for members of college faculties.

High school guidance should concern itself with providing the proper type of differentiated specialized terminal education for pupils who cannot or should not take advanced training and the proper type of differentiated specialized introductory education for those who can or should take specialized training in institutions of higher learning. This guidance program should be so conceived and so administered as to leave the choice to the pupil himself.

The Selection of Students

The problem of college guidance is or should be concerned with securing from the secondary school that type of student who on account of his demonstrated intellectual interest and industry can or should profit most by the special type of general or special training it provides, so that

he may be properly registered when he enters. It should also be concerned with so stimulating and counseling him after he is registered that he may profit to the maximum degree by his college work. The first problem calls for the wise selection of students, the second for the wise handling of them after they have been selected.

It is evident that the guidance programs of the high school and college overlap and that both of these institutions should cooperate in this matter to their mutual advantage. From the standpoint of the high school the pupil who desires advanced work should prepare himself for one or more higher institutions that offer the type of advanced study he desires, so that in case he finds it impossible to enter the one of his first choice he may seek admission to one of the others.

The high school should have for the guidance of its pupils complete information as to the various types of higher institutions of learning. This information should cover the admission requirements of the various curricula, the description of these curricula, and such other information as the pupil should have to help him decide upon the institution in which he should take advanced work. This information should be secured from the principal types of higher institutions, particularly from the institutions of the state in which the school is located. Moreover, each type of higher institution should see to it that such information is sent to those secondary schools from which it desires students and should make every effort to secure effective cooperation from such schools.

What Students Should Be Admitted

A unified guidance program is particularly important for institutions of higher learning that are in any sense teacher training institutions. The proper articulation of high school and college depends in no small degree upon the character of the training that high school teachers receive.

An institution of higher learning should decide upon the kind of student it wants before determining its particular scheme of admission. Few colleges have attempted to do this except in the most general way, yet any effective guidance program is dependent upon it.

The scheme of admission should be so drawn as to admit only such types as the institution desires. When these two things are done, the college will be in a position not only to advise students who seek admission but will also be able to cooperate effectively with secondary schools in securing the type of students desired. Here is

a plan of cooperation that is of mutual advantage to both high school and college.

Then, too, the college guidance program should set up effective ways of helping the students it admits. Particularly important among these are: arranging the programs of those admitted to meet their needs and interests; providing for definite personnel work among the students; providing means for improving the quality of instruction; providing a research department to study all problems that affect the success and progress of students and to make recommendations to the proper authorities as to desirable changes with reference to policy; inaugurating a follow-up program after graduation.

No one knows, perhaps, the best way to accomplish these things, but the college desirous of providing educational guidance will set up some form of administrative machinery to care for this phase of its work. A new type of dean who will be a sort of liaison officer would be a logical person to take charge of such a program. He would have to work with all those who have charge of the admission and teaching of students. If he is selected on the basis of professional training and if he possesses understanding and skill in counseling and has a gift of working with people, he should be able to render valuable assistance and do effective work. He would certainly be in a position to bring into effective cooperation those high school and college forces concerned with the training of students.

Vocational Guidance "Round Tables"

By Millard E. Gladfelter, Supervising Principal, West York Borough School District, York, Pa.

February was known as Career Month for juniors and seniors in West York High School, York, Pa. The library sponsored this activity and on its bulletin boards were found newspaper clippings and magazine articles suggesting, explaining and giving advantages and disadvantages of many professions. Display racks held books on occupations and careers and college and school bulletins.

Mimeographed slips were distributed calling for the occupation that each junior and senior planned to pursue and any questions relative to occupations in general, to specific occupations and to schools. The answers were the basis on which the division of pupils into discussion groups was made.

The girls' groups, four of them, according to similar interests met after school four successive afternoons in one week. The vocational guidance

teacher and the librarian conducted the girls and invited the school nurse, the school hygienist and the head of the commercial department to discuss problems and answer questions.

The boys' "round tables" were guided by the supervising principal and the commercial teacher. These groups were scheduled for the morning activity period.

The Value of an Accounting System for School Bus Costs

Questions concerning school bus costs are more easily answered at Yuba City Union High School, Yuba City, Calif., since the adoption of a cost accounting system two years ago.

According to Thomas L. Nelson, principal, writing in the *Sierra Educational News*, the cost accounting system makes possible the computation of the ratio of depreciation to the total cost of operating a school bus. It also furnishes an answer to the question of whether the rate of interest being paid is too high if the item of interest cost is one-sixth of the cost of operating a school bus.

A summary of the expenses involved in operating a bus during the school year of 1928-29 is

ANALYSIS OF THE COST PER BUS FOR OPERATION DURING 1928-29

Average Annual Mileage, 7,465. Average Seating Capacity, 35

Cost Items	Average Annual Cost Per Bus	Cost Per Mile	Per Cent of Total Cost
Depreciation . . .	\$ 525.45	\$0.0705	31.8
Interest	272.85	.0365	16.4
Insurance	97.50	.0131	5.9
Fuel	136.88	.0186	8.2
Lubricants	9.37	.0013	0.7
Tires	17.51	.0023	1.0
Repairs and Upkeep	190.04	.0253	11.0
Wages of Drivers. .	412.50	.0550	25.0
Total	\$1,662.10	\$0.2226	100.0

shown in the accompanying table. It will be noticed that one-third of the cost of operating a Yuba City Union High School bus was chargeable to depreciation. Drivers' wages constituted a fourth of the operating cost. Repairs and upkeep cost a tenth of the whole, while interest on the investment cost a sixth of the whole. Such an analysis is helpful in that it enables the school authorities to determine which items are out of proportion.

How to Teach Music in Rural Schools

Outagamie County, Wisconsin, has developed a system of supervised music instruction that has been so successful that many other counties in the state have adopted it

By A. G. MEATING, SUPERINTENDENT, OUTAGAMIE COUNTY SCHOOLS, APPLETON, WIS.

THE work in rural school music in Outagamie County, Wisconsin, has gone beyond the experimental stage. We are teaching music successfully in our rural schools as the result of a plan that was developed in our county with the assistance of Dr. Earl L. Baker of the public school music department of Lawrence College, Appleton, Wis.

In recognition of the demand for some cultural training in our rural schools, we developed a system of supervised music. Before this plan was adopted we had tried in many ways to have regular instruction given in singing but for various reasons the attempts were not successful. There-

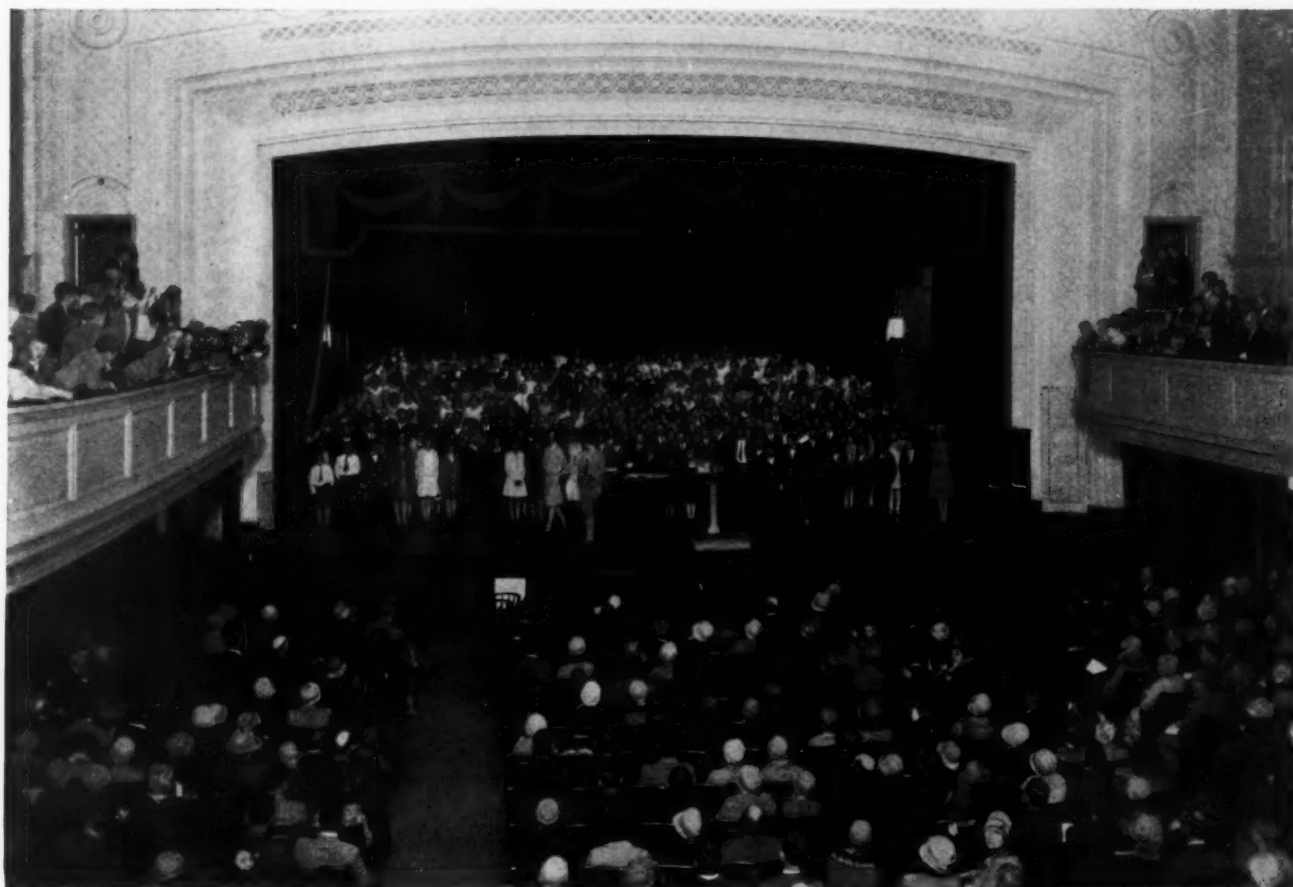
fore in devising a plan we made supervision the basis of the schedule of work.

Of course one rural district could not afford to hire a supervisor, nor would a supervisor find enough work in a one-room school to keep her occupied. We first attacked the problem by budgeting the estimated cost as follows:

Estimated salary of supervisor	\$1,375
Estimated travel expense of supervisor ..	500
Supplies for instruction	100
Incidentals	25

\$2,000

With the matter of expense settled, we turned



A music festival marked the end of the first year of supervised rural school music.

to the administrative side. A supervisor can visit an average of five rural schools a day, or twenty-five such schools a week. On this basis, a week's work is considered a unit, and with the unit cost at \$2,000, the cost per district is only \$80 a year, or about \$9 a month. Thus the cost is well within the reach of the average rural school.

Developing the Plan

With the foundation of this plan well established, the next step was to gain the cooperation of enough school boards to enable us to make a trial. The matter was presented to the district officers at our school board convention in 1927. We gave them mimeographed information of the whole plan, explaining the cost and describing the proposed service. For instance, the supervisor was to call at each music school once a week, according to a schedule worked out by the county superintendent, teach a half-hour lesson to the whole school, including the teacher, and then go on to the next school in the unit. During the period between visits, the room teacher was to drill the pupils on the lesson that had been taught. On the next visit the supervisor would test the preparation for the first assignment, correct any difficulties and make a new assignment.

We asked for twenty-five schools to give the plan a trial and had thirty-eight applications. So we set about to get enough more to establish a

second unit. The first year our two supervisors took care of fifty-eight schools, one teaching in thirty and the other in twenty-eight. This year we have three supervisors in charge of eighty-three schools, so there is no doubt about the success of the plan. It developed because it was successful. Its growth has not been confined to Outagamie County, the plan having spread to many counties in the state.

At the end of the first year of supervised study, a music festival was made the feature of the school board convention program. We invited all of the children enrolled in music schools to come to Appleton to sing for the board members. There were more than eleven hundred children on the stage at one time, and they gave a wonderful demonstration of musical knowledge and ability as the result of their one year's supervised study of music.

What Is Taught

At the beginning of the course, we teach about seventy-five rote songs. Then we teach the staff, the notes, the scale, how to find the key in which a song is written, how to transpose a song from one key to another, the elements of harmony and rhythm, and how to develop a low, sweet smooth singing voice of good tone value. Of course this results in real music appreciation. This is our claim, and that we have done it by our method of group instruction is evidenced by the reports



This music class of the North Osborn School, Outagamie County, Wisconsin, is typical of the rural schools of this section. The music supervisor stands at the left and the teacher at the right.



The music supervisor is teaching the staff with sharps, flats, whole and quarter notes made of wood and large enough to be seen over the entire room.

of hundreds of visitors in the various schools in the units. The fact that emphasis is placed upon the development of correct singing habits makes the work fundamental for any type of musical training that the children may care to take up when they are older.

Financing the Course

The districts have been asked to finance these units themselves rather than to take the money out of the usual school budget because we have felt that the parents would take a greater interest in the progress of their children if their special attention was directed to the work in this way. Our supervisors are graduates of a four-year music course, and one of them has a degree. The other two lack only a few credits for their degrees.

Thus the training is sound in every way, and the pupils have been inspired by the enthusiasm of real musicians. This is why we demanded as our first requirement that the work must be supervised by graduate musicians. Too often rural children have been offered substitutes. Rural parents do not want substitutes. They are willing to pay for goods of known value, and our plan was so well worked out that we practically guaranteed results. We asked the members of the units to pay as they pleased—the whole \$80 at once or two installments of \$40 or four installments of \$20, in any way they pleased—so that they could satisfy themselves as to the value of

the goods and keep money enough in the fund to pay the necessary costs. This year, most of the districts are paying in advance, another testimonial of the success of the plan. The money is paid into the county music fund. It is checked out by the county superintendent and the fund is subject to county audit the same as other county funds.

Our mimeographed information will be sent free to any school board or superintendent interested in the plan presented.

Shall the University or High School Control the Junior College?

That the junior college should become an integral part of the local school system is emphasized by Jesse H. Newlon, director, Lincoln School, Teachers College, Columbia University, in an article, "Shall the Junior College Be Externally Controlled?" in *School Executives Magazine*.

There is general agreement, Professor Newlon says, that the first two years of work in the American liberal arts college is of secondary grade, and that these two years should be included in the system of secondary education. The control and administration of these two years of education, therefore, should be vested in local boards and local administrative authorities. The curriculum should be planned to meet the needs of groups of varying interests and capacities.

Education on the Critic's Pen

An analysis of the problem of recent fiscal attacks upon the public schools is presented here, together with a suggestive solution

BY ARTHUR B. MOEHLMAN, PROFESSOR OF SCHOOL ADMINISTRATION AND SUPERVISION, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

THE expense of providing for public education has been criticized in each school generation. It probably always will be. Intelligent questioning and the maintenance of a critical attitude are of real value to public education, as well as to the people. They should be encouraged.

Within the past three years, however, criticism of the expense of public education, carefully stimulated by selfish organizations, organized and operating secretly in many cases, has grown to such proportions and, in certain instances, has become so vicious that the problem has aspects that merit the most serious consideration upon the part of the school men of this country. This year in particular, aided by the emotional aspects of widespread unemployment and industrial depression, these organizations are making great inroads upon the school financial programs in many states. School plant needs are being curtailed, teachers' salaries held level or greatly reduced and appropriations for the most vital work of the school organization—continuous research—seriously reduced, if not actually eliminated.

The ensuing fiscal year, serious as it will be for many school districts, is merely an accented phase of a general problem. Without the sustaining negative psychology of depression, the groups interested in reducing public education appropriations could not have made the headway they apparently did this year. They have merely taken advantage of conditions.

Complaining Groups and Their Grievances

What are the grievances that give rise to the belligerent attitude of these hostile groups? Insofar as they have been published or uttered, summary may be made as follows:

1. The public schools are spending too much money.
2. The public schools are educating too many children.
3. The public schools are more concerned with "frills and fads" than with solid education.
4. The public schools are implanting the

"white collar job concept" in too many children.

5. The public schools are building extravagant "marble palaces."

6. The public school teachers are underworked and overpaid.

It must be obvious to anyone at all familiar with the situation that these complaints are merely surface disturbances behind which lie much more significant attitudes and purposes. These antagonistic groups are merely casting about for a successful slogan, an emotional "catch-all" that will win popular approval and support. The "Sanctified Squandor" slogan of the Cleveland groups is an illustration of such a method.

Placing the Blame for Unfair Criticism

This problem is a serious one and merits the most careful consideration, analysis and thoughtful action. It cannot be solved overnight. It will require just as much consideration in the future as we have given it complete neglect in the past. Careful observation and study during the past five years lead to the conclusion that two significant factors are behind it. These include individuals, particularly large realty holders, who do not believe in a system of public education free and open to all, and social groups which, because of traditional culture, feel keenly the results of public education upon their traditions and beliefs. Most of these individuals are basically quite sincere and honest in their attitudes and beliefs. If we concede the soundness of their philosophy, they may also be considered as reasonably consistent.

Many other factors may appear to be basic but these can be disentangled and classified as contributing rather than basic elements. In the last analysis, the present serious attacks against public education are primarily attacks upon the basic social philosophy underlying our public school concept and practice and they should be considered and met upon these grounds alone rather than in terms of highly emotionalized reactions to specific personalities or organizations.

With the real conflict classified as the result of

vital differences in social and political philosophy, let us consider some of the contributing factors. The first of these is the school tax. Under our rather archaic methods of taxation unusual burdens fall upon general property. Gross analysis also shows that the major part of the tax dollar is devoted to public education. Without any other data to guide them, the natural reaction of a critical individual is that we are spending too much for public education. Particularly in our urban centers where so much of the most valuable real property is held by relatively small groups of individuals, the amount of the school tax is a constant provocation. Where large retailers and downtown property owners have banded themselves together, generally under the secretarial leadership of a former state legislator, their attitudes are constantly determined by gross statistical analysis of monies paid into the public coffers. Purpose and outcomes are seldom considered. Any increase means a negative reaction.

It is true that educational expense has increased rapidly from prewar days. It is unnecessary to present the analysis again.¹ The story of educational expenditures since the war is not so well known.

In 1922, we spent for public elementary and secondary schools, for current outlay and capital expense, a total of \$1,680,671,296, or 2.4 per cent of our total income. In 1928, we actually spent a total of \$2,184,847,200 for the same purposes, or 2.4 per cent of our income. The total expenses increased \$504,175,904, but since the national income increased \$18,985,000,000 during the same period, the relationship of public school expenditure to total income remained the same.

Can Business Concepts Be Applied to Education?

The second factor that is contributing to misunderstanding is the attempt of every business man to reduce everything to the common denominator of business and to reason by analogy. Sad to relate, many of our prominent school men, particularly the business manager, have greatly aided and abetted this procedure and are now reaping the harvest. It must be admitted that ours is an industrial civilization whose chief characteristics are mass machine production and mechanical efficiency. Out of this industrial culture have come several beliefs. The first of these is that "the greater the volume, the smaller the unit cost." The second is that "the greater the product, the smaller the personal and operating overhead." The third is that "in times of depression shut down everything except advertising and

research." A fourth and most significant law that is slowly being recognized both by management and capital is that "the consumer and the producer are different aspects of the same identity."

The first two concepts have been applied rather unintelligently to the measurement of education. The public schools are growing rapidly. Not only are they expanding horizontally with respect to total numbers, but they are also expanding vertically in the preprimary and the late secondary fields in response to well defined social needs. Since the complicated program and technical methodology of to-day require better trained teachers, salaries are slowly being raised to meet these conditions. It is quite obvious that increased training, other factors being constant, will require larger salaries. Due to no fault or no control of the school men, building costs have also increased. Mandatory state and local statutes require certain construction standards for safety and other reasons that no school board can be held responsible for cost.

The Industrialist—a Radical Conservative

All of these factors call for increased expenditures. Every community, except those that are absolutely static with respect to population, requires larger amounts for current expense annually. This the business man does not understand. Remember the law of "the greater the volume, the smaller the unit cost." "Why not apply business methods to public education?" is the plaint of the efficient industrialist. He fails to realize that the education of children is not a "stepping up" process, that it is still an intellectual process to which no machine or mechanical conveyor belt system can be applied. He fails to realize that, unless the children are to be run through the plant in six hour shifts, with the plant in use twenty-four hours a day, and with the rest of their lives and those of their families arranged accordingly, it is essential to make plant additions for every increment of growth. He fails to see that the teacher, engaged in a highly intricate activity, cannot be speeded up to greater production by pressure of a button, and made to turn out more units within a given period. He fails to see why overhead should grow proportionately with volume.

Supervision to him means stimulated production and lower unit cost. Supervision in education means improvement of the product through increased efficiency of teaching technique, but at no particular increase in expense. Strange as it may seem to us when we consider this fact, the average business man has just those concepts

¹ These data may be found in the research bulletins of the National Education Association.

of public education. When to these concepts are added his annoyance at an archaic tax system, his social and religious affiliations and prejudices, it would be nothing short of remarkable if he did not have these viewpoints and if he did not organize to express his unqualified protest.

A third contributing factor is that the modern industrialist is an economic radical and a social conservative. If he were not, all government could be more efficient. With little or no regard for tradition or past practice, he maintains industry in a dynamic condition. He makes unhesitating use of the latest findings in research, both with respect to management and product. He never hesitates to scrap expensive machinery if newer machines will do the job better. In the economic field, he appears to have reached manhood. Upon turning to social and political organization, we find that this same industrial giant is only an adolescent. He clings with fearsome avidity to outworn tax practice and tax machinery. He operates politically just as his father did before him, despite the fact that his industrial progressiveness has completely destroyed the culture under which his father lived.

He still believes in the "good old school of the three R's" and in a rigid mechanical discipline, although he helped create the culture that made educational change necessary. He does not think the "schools are as good as they used to be." He believes that "foolish white collar notions are being placed in the heads of young men." He fondly imagines that the school, overcoming all other social factors, "should train the women for their proper position, the home." He does not believe much in educational research. Teaching is an easy process to him for "all you need is a classroom, some children and a primer. Put them together and have the teacher teach the primer. What's difficult about that?" This industrial radicalism and social conservativeness are excellent examples of lack of transfer, and are among the serious problems we face to-day in public education.

Who Is to Blame?

The fourth contributing factor is public education itself. Whatever conditions exist, we have only ourselves to blame. Whenever inadequate support and sordid individual and group selfishness have affected the program, it is not difficult to determine that ineffective leadership was responsible for this condition. With the smug superiority of the bureaucrat and the traditional academic disdain for those not well trained and degree equipped, we have assumed an aloofness worthy of unreasoning Bourbonism in its prime.

We have created an organization in which more emphasis is placed upon the so-called "business aspects" and activities than upon instruction itself. In one large community four-fifths of the executive organization is specifically devoted to noninstructional activity and only one-fifth to instruction.

What Is the Way Out?

We have appraised the efficiency of education in such futile ways as percentage of attendance and tardiness. We have unintelligently carried over into education the industrial cost concept measure, without actually knowing what a cost was. The industrialist has always used a real cost, while we have blithely accepted a time-expense unit, something quite different from a cost, and tossed it about as if we really knew something about it. We have used "raw cost" index data far beyond their basic values and potentialities.

We have used the adolescent method of meeting complaints and proving our own virtue by making futile and unintelligent statistical comparisons between different school districts without apparently either understanding the meaning of these data or recognizing the fundamental law of the single variable. We have bandied tax rates and juggled valuations. We have considered expense entirely apart from product. Many of these activities have become ends in themselves instead of means to an end. In short, there is scarcely a fault in mechanical procedure that we have not committed and continued to commit in face of all contrary and obvious facts. This fourth contributing factor is a serious one and, in many respects, is largely responsible for present social attitudes and conditions.

What is the way out? Public education rests upon the will of the people. Only a definite expression of this will can legally change it. Our history tells us that legal nullification is not an extremely difficult process. Careful analysis of the manner in which change takes place indicates, however, that a small silent well organized and intelligently directed minority can thwart the real will of the people.

The first consideration is a recognition of the fact that no public institution, dependent upon the will of the people, can exist successfully in a dynamic social organization without a program whereby the adult community can be definitely, constructively and continuously brought into contact with the purpose, value, conditions and needs of the institution. With respect to public education, this program must be developed not in terms of tax rates and unintelligently used raw cost

data, but upon the needs of the child and the social organization. A program of education must be considered, organized, developed and experimentally tried with the same degree of skill with which we would organize curriculum and methods for regular day schools. Both professional and nonprofessional agents must realize that their work has a twofold aspect, first, to teach or to perform duties that facilitate teaching, and second, to educate the community to an understanding of the value of their efforts. The type of institution will be determined by the efforts of the professional group. No one else is responsible. Present attitudes toward the schools are the direct outcome of the neglect of this important phase of creative leadership.

The Functional Organization

Many school men believe they have covered this field when they have arranged a publicity program in which many of the nice, but relatively unimportant activities of the schools are featured. In a program of public relations, publicity is only a single phase of activity and, while important, it is not the determining or really vital factor. It would be possible to carry on an effective program of public relations without even using the newspapers, although such procedure might not be wise. The program of public relations or community education is much broader and deeper. It is really a scientifically organized curriculum for the formal and informal teaching of adults.

The second step is just as vital as that of recognizing the problem and providing for a complete public relations plan. It is concerned with organization. Organization is a mechanical facilitating expression of purpose. Where purpose is seen in a hazy way and where there has been lack of educational statesmanship, the results are apparent in the character of organization. Where school organizations are emerging from local political allegiances and traditional contacts, these factors are quite obvious in organization.

The time has come when educational leaders must frankly admit that the purpose of public education is the training of the child in accordance with his individual and social needs and the needs of society. Since organization is merely a means to an end, all organization, both theoretically and practically, must be developed in terms of such purpose. All activities essential to the expression of purpose must be considered as subordinate and contributing to the central purpose. The educational policies must dominate every activity and subactivity. The worth and value of all agents and agencies must be considered upon the basis of their contribution to the achievement

of the educational objectives. Under this concept, the executive function should be delegated completely to a professional executive trained and skilled in the profession of education.

Functional organization of the executive does not recognize any differentiation of activities into such classifications as "education" and "business." It recognizes all essential activities as subordinate and complementary to the main objective—the education of the children. It departs from the traditional concept and makes the facilitation of instruction the basic criteria in appraising results. A single, well coordinated policy pervades all complementary activity and provides for essential coordination of effort which is almost impossible in practice when there is equality among complementary activities and the executive authority is scattered among a series of lay committees or individuals. The answer to this problem is the further development of the unit organization.

It is next necessary to stop our rather foolish practice of using uncontrolled factors as hard and fast bases for intercommunity comparison, such as tax rates and raw costs, which may have index or trend value. This is one of the most dangerous practices because these comparisons are misleading at best, and untruthful at worst. Since we use them seriously, it is perfectly natural to expect that business men and other laymen will make similar response. Mere money cheapness is no criterion of what is actually taking place in the schools. School men must realize that raw cost data have no value except as index figures. They represent a starting point in investigation. If they are absolutely accurate, and most of them do not even have that virtue, they indicate differences and irregularities within a given school system, which offer a problem that must be attacked and solved educationally. Raw cost data have scarcely as much validity as the old-fashioned age-grade report. Intercommunity comparisons upon raw cost data, without regard for the variables involved, are scarcely intelligent procedure. We must realize that raw costs mean only money expenditures upon a time-unit, in which product has no place. Their value is correspondingly limited.

The Mechanics of Finance

Our next care should be in the field of the mechanics of finance. Cost accounting systems, developed in terms of purpose and adequate enough to make real cost procedure possible, are essential. The functional organization of the finance program, or budget, in terms of policies and purposes, rather than as crude comparative

statistics, is a complementary essential. The budget should be intelligible. It should be understandable to the layman in terms of the educational activities pursued. It should be simple in terms of expense comparisons. In fact, the degree of social as well as technical skill with which the budget is built, presented and administered may be an immediately vital factor in the success of the finance program.

The Professional Educator's Debt

As professional educators we owe to the public the most careful and intelligent spending of public monies. We need to investigate objectively every unit of our entire procedure, even though our tools are still crude, and determine policy in terms of changes and outcomes rather than blindly upon a statistical basis. This means the encouragement of and provision for research upon a much wider basis than at present. It means that in times of stress, the fact finding activity will be one of the last, rather than the first, to be curtailed. It means that much greater recognition must be given by the school executive to the objective worker. Emphasis upon applied research is one of the means by which we shall be enabled to solve our serious problems. No one knows whether we are to-day spending too much or too little upon education. No one will be able to find the answer in terms of pure statistical analysis or upon the basis of raw costs. The answer must come through the results of painstaking research.

In brief summary, these facts may be reassembled. There is more agitation at present against the so-called "high costs" of education than at any time since the war period. These discussions are being organized by small minorities who, for personal or cultural reasons, would like to see the public school program curtailed. These well organized minorities will be effective and will curtail activity insofar as they can make their program of education appeal to and motivate enough persons to vote for them. Basically, the difference between the groups antagonistic to the public schools as now operated and the groups favorable to the activity is one of fundamental philosophy and cultural outlook. It is questionable whether this basic conflict can be eliminated. It is possible, however, for the friends of public education to reach the same audience that these private organizations do. In fact, the story of public education during the next decade will be determined largely by the success that either school of thought has with this popular audience. While the present situation is undoubtedly due to lack of leadership

upon the part of the professional educator, it is still possible, through an intelligent organization of a complete program of adult community education, to bring home to the parents the worth, value, conditions and needs of public education. The professional group is much more advantageously situated than any destructive clique. A philosophy of negation has short life in our optimistic culture. The emotional values that will probably determine the issue are all in favor of the organization. The problem can be solved through the development of a continuing program of public relations, skillfully conceived and intelligently carried out.

Paralleling this program, it is essential that educational organization be conceived and developed in terms of educational purpose, as a means and not as an end. Organization must be developed, operated and appraised in terms of purpose and not as jobs or in accordance with traditional prejudices and antipathies. Unity of policy, co-ordination of effort and the relative value of complementary activities may be best gained through unit organization of the executive under a professional educator.

Educational organization owes to the people the assurance that the public money raised for the support of the public schools is intelligently and efficiently used. The mechanics of organization and of agencies, particularly in the field of finance, must be studied and developed so that first of all we may be absolutely certain of our basic facts. We must also learn to interpret these facts intelligently and not continue to use inadequate criteria and foolish methods of meaningless intercommunity comparisons. We must learn to use raw cost data as a barometer, a starting point in intercommunity research. The best way of assuring ourselves and the people of the efficiency of instruction is to provide for more and finer research into both procedures and products.

Four Years in One Is the Record of This High School Pupil

To be a high school freshman, sophomore, junior and senior all in one year is the unique experience of Joseph McCarthy, twenty-one, who, having received his diploma from Manawa, Wis., this Spring, is now planning to enter college in the Fall where he intends to study electrical engineering, according to the *Journal of Education*.

He was graduated from grammar school six years ago, and since that time has been working to earn money for his college education. He entered high school only last Fall.

Are Your Pupils Comfortably Seated?

If the school desks and chairs are of the correct height and depth, the children will not only benefit physically but will learn quicker because they are at ease

By LESLIE A. BUTLER, SUPERINTENDENT OF SCHOOLS, GRAND RAPIDS, MICH.

ALTHOUGH the findings of a survey recently made of the seating facilities in the schools of Grand Rapids, Mich., revealed certain faults it should not place Grand Rapids schools in an unfavorable light. The seating conditions in these schools are probably as good as in any other school system of similar size. However, a consideration of the defects noted and the corrective measures followed may stimulate authorities in other cities to make similar investigations instead of experiencing a complacency that is based on lack of accurate knowledge of the facts.

More than 14,000 sittings in the elementary schools of the city were considered in the survey. These schools include all pupils below and a few in the seventh grade. The chief deficiencies found were a lack of clearance between the knees and the under sides of the desks, and seats that were either too deep or too high for the pupils. An additional defect noted was that the window arrangement made it necessary for some of the

pupils to sit so that they faced a glaring light.

Seventy-nine per cent of the kindergarten chairs, 73 per cent of the department's primary chairs, all of the sundry chairs in special classrooms and 51 per cent of the school desk seats were found to be too high for the pupils using them. In general, excessive seat height is much worse in chairs of all kinds than in school desks. Both adjustable and nonadjustable desks, however, are often too high.

How to Correct Misfits

Apparently decided misfits are found more commonly among the nonadjustable seats. This cannot be corrected except by change of furniture. The misfits in adjustable seats are more often due to inaccurate adjustment and this can be easily remedied. The desks with nonadjustable seats, however, are mostly of obsolete types and are being replaced by adjustable ones. Some of the desks, too, were originally used by seventh and eighth grade pupils who have been trans-



These rows of desks are arranged diagonally.



Both of these pictures illustrate incorrect seating arrangements. In the one above, the distances between the fronts of the desks and the backs of the seat are too great. Below are shown some school chairs with seats that are too deep from front to back. These chairs are being rapidly exchanged for better ones.



ferred to junior high schools, and the reseating program that is definitely under way has not yet caught up with these changes.

As far as the school desks are concerned, the elimination of the nonadjustable desks and the increased skill that principals and physical education teachers will doubtless attain in manipulating the adjustable desks will soon solve the problem of correct seat height.

The seats of most of the chairs used are too deep from front to rear and the seats of the school desks are too deep for 23 per cent of all the children. For 71 per cent of the children using school desks there is two inches or less

sound in providing flat-top tables and unattached chairs for the informal activities of the kindergarten and for the first and second grades, and in using for the grades in which writing and study are major occupations individual school desk units in which seat and desk have a definite and constant relationship.

The seats provided for 70 per cent of the kindergarten pupils have eight inches difference between the chair and table heights; the seats of 50 per cent of the first grade pupils and of 66 per cent of those in the second grades have ten inches difference. In these facts there is nothing to criticize. Many of the tables are made with an



A satisfactory group arrangement of adjustable desks.

clearance between the edge of the seat and the angle under the knees. It is significant that 23 per cent of the pupils have no clearance whatever and are unable to sit well against the back of the seat. Practically all of the latter group are using school desks that have seats of the saddle or chair type.

Probably the most important finding of the survey deals with seats and desks that are too high. The chief difficulty in adjusting desks that are too high rests in the book boxes. If the book boxes were one inch shallower, 30 per cent of the desks could be properly adjusted and the position of the others improved.

The Grand Rapids practice is undoubtedly

apron (with or without a drawer) 6 inches wide, including the thickness of the top. Often insufficient space is left for the pupils' thighs between the chair seat and the under side of the table. This difficulty is aggravated by the fact that chairs are not and probably cannot be kept at the tables at which they are supposed to be used. Not uncommonly there is only an inch or two between the chair and the table apron or rail, so that pupils cannot get their knees under the tables.

The height of the desks must be considered from two viewpoints—the height in relation to the seats and in relation to the knee space under the desks. The survey shows that more than 53

per cent of the desks are too high for the seats and only 8 per cent are too low. But it is important to note how the recommendations for lowering the desks in order to secure correct writing height are affected by the space over the knees in which they can be lowered. Altogether, 72 per cent of the desks are reported as having the same knee clearance as the amount the desk is to be lowered, or less than this amount. For these 1,963 desks, correct adjustment is impossible because of the depth of the book boxes. If the boxes had been made one inch less in depth, correct adjustment would be possible for 1,021 desks.

Providing Correct Lighting

With the exception of a few rooms in old buildings, the lighting of the Grand Rapids schools conforms to the recognized standards because all the windows are in the left or left and rear walls. The traditional arrangement of desks in straight lines parallel with the windows prevails, except in certain schools or rooms that have recently adopted the diagonal or quadrant arrangement.

To correct some of these deficiencies, readjustment and rearrangement of seats with reference to height have been planned. Whenever seating of the stationary type is rearranged or interchanged, it should be borne in mind that most of this furniture is going out of date and may be replaced within a few years. To facilitate possible future rearrangements and particularly to avoid injury to floors by too many screw holes, such furniture has been mounted on strips rather than directly on the floor. One advantage of this arrangement is that it is easier to clean the floor. The mounting increased the height of the furniture by the thickness of the strips, and this factor had to be considered in distributing the remodeled furniture to the rooms.

Excessive height of wooden chairs has been corrected by cutting off the legs to secure the proper height. If finances permit, it is of course better to retain only chairs that are of proper size and to supply new and properly designed ones for the smaller children.

In many of the desk seats in which the spacing from front edge to back support is too great, the seat has been shortened from the rear by moving the back support forward as far as the construction of the seat would permit. This method obviated moving the seat on its pedestal or moving the pedestal on the floor. It also had the distinct advantages of removing the objectionable elevation at the rear of most of these seats and of preserving the shape of the front edge which would be difficult or impossible to reproduce.

Choosing the Right Colors for the Schoolroom

In decorating a room, the effect of color on the size and space of the room should be given serious consideration, an article on "The Principles of Interior Decoration" in the *Virginia Journal of Education* points out.

For the walls and background spaces, like rugs, it is best to select the least advancing colors, neutralized buffs, blues and greens or even gray, as these colors give a more spacious and restful aspect than the more brilliant advancing colors.

Color should also be considered in relation to the room's exposure. If the room faces north, colors should be chosen that will bring warmth and cheer into it. The eastern room at some hours of the day has sunlight, but there are many in which the sun is absent. So it is treated much in the same manner as the northern room. The southern sky reflects the warmest light of all. Too much sunshine, however, can become wearisome; so the interior decorator tries to neutralize the sun's rays with cool colors, but never shutting out the sun. The western room, although it receives less sunshine than the southern room, should also be treated with cool colors. Very brilliant colors should be used only in minute spaces where an accent of color seems needed to liven up the room.

Now Is the Time to Get Ready for Next Year

"School administrators find that organization for the school year 1930-31 is already well under way," an article in the *Indiana Education News* emphasizes. "Now is the strategic time for encouraging principals, teachers, building caretakers and school trustees and officials to make necessary provision for the demands of the coming school year. Supplies should be listed and preparations for purchase outlined. The choice of subjects in secondary schools using the alternating type of subject offering should be scheduled. The selection of teachers should be made.

"Improvements in administration and in plant equipment should be determined upon and cared for. Plans for plant enlargement or better utilization of classroom space should be well under way. In fact, the wise administrator is now acting under the full realization that he actually has no time to spare if his organization for the coming year is to show progress and is to go smoothly into operation upon the opening of school next autumn."

Grading Systems in Eighty-Nine Colleges and Universities

This questionnaire study shows a tendency toward wide diversity in a field in which, for administrative purposes, a high degree of uniformity would be convenient

BY M. J. NELSON, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS

SINCE the studies made by Starch and Elliott, by F. J. Kelly and others there has been considerable agitation concerning the proper system of grading.

It has been argued that if teachers' marks are so unreliable that a given paper may be assigned such diverse grades on a percentage scale as 30 and 90, and if a given teacher is so variable in her own estimates as to rate a given paper quite differently on successive attempts, then to make such distinctions as are required in assigning a grade of 92 instead of 93 is quite beyond the ability of the classroom teacher. The result has been that many schools have abolished the percentage system and substituted a system of letter grades, in which the student was rated on one of three, five or seven possible groups.

Probably because students are so much concerned about grades, there is always considerable agitation concerning the marking system in most institutions. No sooner is a new system adopted than someone finds that it does not exactly suit the need of all concerned. The result is that there is a tendency toward rather wide diversity in a field where, for administrative purposes at least, it would be convenient to have a rather high degree of uniformity.

Various Systems Are in Use

The study here reported is concerned with determining what are the types of marking systems commonly employed in colleges and universities. For this purpose the accompanying questionnaire was sent to 140 universities, colleges and teachers' colleges in various sections of the United States.

Replies were received from eighty-nine institutions and it is upon these replies that the following report is based. It will be recognized, of course, that so far as matters of opinion are concerned, the replies may not be representative of the institution but only of the registrars of the various institutions.

In the matter of the use of objective measuring

instruments, only six institutions reported that they required their use, but from thirty-two it was reported that their use was encouraged. An increase in the use of objective tests is indicated by replies from forty-one institutions as contrasted with thirty-one cases in which it was reported that there is no apparent increase in their use.

Letter Systems Are Popular

Only twenty-four institutions indicate that the marking system has recently been changed; fifty-four reported that there has been no recent change. The most frequent change to be noted is the change from the percentage system of grading to some form of the letter or numerical system that corresponds to the five-point or seven-point letter system which this study shows to be commonly in use. Such a change is reported by ten institutions. On the other hand, two institutions report that they have changed from the letter to the percentage system. Many of the recent changes have been of a minor sort. Two institutions report the adoption of a grade point system; one reports the discontinuance of the recommendation that a certain percentage of the grades fall in each classification, while two have recently made the recommendation that there should be uniform distribution of grades. Two institutions have changed their letter systems in the direction of a smaller number of grades, whereas two have changed their letter systems in the direction of a larger number of grades. These changes have frequently been brought about by the insertion of discontinuance of plus and minus signs. One registrar asserts that "pass" and "fail" are about all the grades needed.

From fifty-four of the institutions reporting, satisfaction with the marking system now in use is indicated. Thirteen feel that some modification is desirable, while the remainder are non-committal. Among the changes recommended are: a rule for the distribution of grades, the use of letters instead of percentages, a change in the

To the Registrar:

This questionnaire is being sent to the registrars of a number of colleges and universities in an attempt to determine the present trends in grading systems. We shall be happy to make the results of the study available if you are interested.

1. Do you require the use of objective measuring instruments? If not required, do you encourage their use? Is there a tendency toward an increased use of objective tests in your institution?
2. Has there been a recent change in your marking system? If so, please indicate the nature of the change and the reason for making it.
3. Do you feel that there should be any change in your marking system? If you do, please indicate the nature of the change you recommend.
4. If you use a percentage system of grading, what is the lowest passing grade? What average is the student required to maintain?
5. If you use a letter system of grading, please enter in the first column the letters used (beginning with the highest grade) and indicate in the adjoining column the number of grade points or honor points which accompany each grade. In the third column indicate the percentage of a large number of grades which is supposed to be assigned to each letter and in the fourth column the percentage of the total number of grades which are actually assigned to each letter during a given time.

Letters Used	Grade Points	Expected Per Cent	Actual Per Cent

 - A. How many of these grades are passing grades?
 - B. Are plus and minus signs used following any or all of the letters?
 - C. Do you require that a certain percentage of the grades be above the lowest passing grade? If so, what percentage?
 - D. What average must be maintained?
6. What is the effect on the student's grades if he has excused absences? If he has unexcused absences?
7. If a student earns superior grades, is he given more hours of credit than he receives for average grades? Are the hours of credit reduced if his grades are below average (but above failing)? Do you favor such a plan?
8. If you have a pamphlet explaining your marking system or any studies concerning the grading in your institution, please enclose a copy.
9. Please send me a copy of your catalog.

Thank you for your cooperation.

This questionnaire was sent to a number of colleges to determine the grading systems used.

percentage system from the passing mark of 65 per cent to a passing mark of 60 per cent. One school that is now using both letters and numerals suggests the abolishment of the numerals. One institution that has four passing grades recommends that the lowest passing grade should not count toward graduation, and one institution recommends three grades, namely, "high," "pass" and "fail."

Only eighteen institutions use a percentage system of grading. Of these, six require 60 per cent as the passing grade, one requires 65 per cent, nine require 70 per cent and two require 75 per cent. Averages required for graduation in

institutions using the percentage system range from 60 per cent to 80 per cent, with 77 per cent representing the median as well as the model practice.

Sixty-six institutions use a marking scale that contains four passing grades, and of these, sixty-two use the letters A, B, C, D to designate these grades, indicating a decided trend in the direction of the use of these letters. Of the other four institutions, two use E, S, M, I, and two use the numerals I, II, III, IV. For the other grades below D, there is much variation for designation of incomplete, condition, etc., but F is commonly used to designate failure.

With regard to grade points on these five-point scales, twelve institutions use no grade point system. The other institutions give grade points as follows for grades A, B, C, D and E or for other letters or numerals designating a corresponding grade.

<i>Number of Institutions</i>	17	5	4	2	1	1	1	1	1
A	3	3	4	6	2	6	9	6	11
B	2	2	3	4	1	5	6	4	8
C	1	1	2	2	0	4	3	2	4
D	0	0	1	0	-1	3	0	0	1
E	0	-1	0	0	-2	1	-3	-2	-4

In addition to the thirty-three systems mentioned, there are several institutions that have similar systems except that, by the addition of a lower failing grade for which additional deductions are sometimes made or by the insertion of a plus or minus sign, the system has become, in effect, a six-point scale. Not all of the institutions require a certain grade point average for graduation, several stating that such an average has no influence on permission to graduate. Of the four institutions that give grade points as follows, 4, 3, 2, 1 and 0, no stated average is reported as being required by three institutions while the fourth requires an average of 1.6 grade points for the two-year students and 1.75 grade points for four-year students.

Eleven Use Seven-Point Scales

Eleven institutions use marking systems that are essentially seven-point scales. These systems vary from the five-point systems most frequently in that plus or minus signs are permitted to be reported with certain of the letters. Five of these institutions do not use the grade point system. Among those that do use a grade point system, fractional grade point credit is usually given for grades designated by plus or minus signs. Some institutions permit their instructors to report plus or minus signs with the grades without affecting the grade points the student receives.

Four-point systems are used in three colleges, and in some of the colleges of Yale University there continues an adherence to the 400-point system, with 200 as the passing grade. Every student is required to earn thirty-six semester hours of credit with grades above 275 in order to graduate.

It appears frequently that institutions that use letter systems also adhere somewhat to the percentage system in that the letter A is indicated as representing a grade of 93 or above, B from 85 to 92, or similar values.

Forty of the institutions reporting indicated

that no recommendation is made to the faculty as to the distribution of grades expected. Among those that do make recommendations, the most frequent recommendation made is that the distribution approximate the 5, 20, 50, 20 and 5 plan. This is the essential recommendation of eleven institutions, five of which indicate only certain limits, such as 3 to 10, 15 to 20. The recommendation 10, 20, 40, 20, 10 appears three times, while 7, 24, 38, 24, 7 appears as often. Other recommendations appearing once each are, 10, 37, 37, 10, 6; 11, 29, 39, 13, 4; 5, 20, 50, 15, 10; and others that are slight modifications of these mentioned.

Effect of Excused Absences on Grades

A number of institutions have made tabulations of the grades that faculty members assign and the deviations that occur are ordinarily in the direction of making a curve that is skewed toward the upper end of the marking scale. Only two institutions reported a distribution that was skewed in the opposite direction. When we average the twenty usable distributions that were reported from institutions using a five-point scale, we find a distribution approximating 11, 30, 40, 13, 6.

Where seven-point scales are used, the same recommendations concerning distributions are found. That is, where the 5, 20, 50, 20, 5 plan is suggested, B and B+ together are expected to consume about 20 per cent of the grades.

The average that must ordinarily be maintained is C on the scale of A, B, C, D and E, and the control is ordinarily exercised through the grade points. Thirty-four replies indicated that a standard above that represented by the lowest grade must be attained; twenty-six indicated that a passing grade is all that is required.

What is the effect on the student's grades if he has excused absences? Of the eighty-two replies to this question, fifty-one indicated that excused absences had no effect on a student's grades. A number of these replies indicated that instructors who so desired might require that the work be made up. An additional number, thirteen, indicated that the matter is left entirely in the hands of the instructors, while two reported that there is no definite rule. Seven replied that a certain number of absences is permitted, the number being in proportion to the number of hours of the course. Five reported that grades are reduced, and three said the work must be made up.

With regard to unexcused absences, thirty-three indicated that all of these caused a reduction in the grade, four indicated that a reduction was made in case the number exceeded a certain

limit and two reported that additional credit toward graduation is required for "excess cuts." Nine reported that such absences had no effect, whereas three said the student was dropped or failed if the work was left incomplete but did not indicate whether this was the penalty for one absence or more. Two replied that the student was not allowed to make up the work, and one reported a reduction in credit and two in honor points. Seventeen indicated that the matter is left entirely in the hands of the instructor, although one of the registrars thought there should be control from the office. Two reported that a zero grade is given for each recitation so missed.

When Is Additional Credit Given?

In the matter of additional credit for superior work, one university recommends allowing "1.1 credit for each A credential attained" in the colleges where such an arrangement is possible. In another university the following regulation exists: "For fifteen semester hours of A, one bonus is given; for thirty semester hours of B, one bonus is given." Each bonus credit decreases by one credit hour the amount required for graduation. At one university 20 per cent additional credit is given for A work, and 10 per cent additional credit for work of B grade, whereas work of D grade receives only 90 per cent of the normal credit carried by the course. One university sometimes gives additional credit for additional work done in a course, if the additional work meets certain prescribed standards. Two other large institutions indicate that they have such arrangements but the details were not learned. Seventy-two replies indicated that no such arrangement is effective and only fourteen of the persons making reply expressed themselves as favoring such a policy, whereas sixty-four indicated that they did not favor it. In the institutions where such a plan is used, it appears to be in favor with the registrars.

In summarizing this study the following statements may be made:

1. Objective tests are being used increasingly in the majority of the colleges although only six require their use.
2. Recent changes have been made in the marking systems used in twenty-four institutions. The most frequent change is from the percentage system of grading to a five-point grading system.
3. Satisfaction with the present grading system is reported from fifty-four institutions.
4. Only eighteen institutions use a percentage system of grading.

5. Seventy-four per cent of all of the institutions replying report the use of a five-point grading system with four passing grades. Ninety-four per cent of the institutions using such a system represent their four passing grades by the letters A, B, C and D.

6. Considerable variation is found in the systems of grade points employed, but the following points are most often given: A—3, B—2, C—1, D—0.

7. Eleven institutions have seven-point scales and four use a four-point system.

8. The recommendations made to the faculty concerning distribution of grades, when any recommendations are made, are for the use of an approximation to the normal curve as a guide.

9. The distribution of grades reported from institutions that have made tabulations, indicate that the curve is markedly skewed toward the upper end of the grading scale.

10. A majority of the institutions replying require that the average grade be higher than that represented by the lowest passing grade if the student is to graduate.

11. In the majority of instances excused absences have no effect on a student's grades while many reports indicate that the instructor is expected to use his own judgment in the matter.

12. With regard to the practice of penalizing the student for unexcused absences there is much diversity. Some institutions allow a certain number of absences without penalty, whereas in other institutions such absences decrease the grade.

13. Only six institutions report that they give extra credit for superior work or reduce credit for work of inferior grade. Such a plan does not appear to be favored by those reporting.

Reorganizing the Daily Program for One-Room Schools

C. A. Howard, superintendent of schools, Oregon, Ind., has issued a bulletin on the reorganization of the daily program for one-room schools. A discussion of the use of combination, alteration and correlation of subjects in the reduction of the number of classes and the presentation of illustrative programs marks the discussion as one valuable to rural administrators. When one reflects that a rural teacher faces the possibility of thirty-five to forty classes in a six-hour day, the seriousness of the program problem is realized. Superintendent Howard's bulletin also discusses unusual phases of technique, such as the long period of supervised study method and the "two way" or individualized study plan.

What the Dean of Girls Means to the High School

Since the home seems to be conceding to the school more of its responsibilities in preparing children for future citizenship, the dean has an excellent opportunity to assist girls to become worthy members of society

BY ISABEL K. ENDSLOW, DEAN OF GIRLS, LOWER MERION JUNIOR HIGH SCHOOL, ARDMORE, PA.

THE need for a dean of girls on our high school faculties has recently been recognized. In 1913, Ella Flagg Young, superintendent of schools of Chicago, appointed a woman as dean in every school of her city saying, "What you are to do, I do not know, but I should like the girls in our public schools to have the quiet simplicity and refinement that emanate from the private school."

According to Lois Kimball Mathews, formerly dean of women at the University of Wisconsin, "The underlying principles upon which the position of dean of women is emerging into a definite administrative and academic office are, first, the right of a woman to the highest possible individual development, intellectual, moral, social and spiritual, to the end that she may be the best kind of woman; second, the right of a woman to the highest social development in the sense of responsibility to the groups in which she finds herself—the family, the civic community, the economic group and the state."

The development of the girl as an individual has until recent years been considered a home problem. But with the vast changes that have occurred in conditions and standards of living during the last few decades, with the introduction of the realities of modern inventive genius and the tremendous power they offer to our boys and girls and to their parents, the home is conceding to the school more of its responsibility in the preparation of its boys and girls for future citizenship.

Training for Future Citizenship

In undertaking this momentous task of molding the lives and characters of our boys and girls and of directing the formation of their habits and ideals, the school has assumed an obligation of which the average layman is barely cognizant. The high school, particularly the junior high school, meets the boys and girls when they are entering upon a new period of their growth. They are living in an age of adolescence, an age

of beginnings not only in their physical and sex life but also in their mental attitudes and their social life. A mighty force is stirring in them. They are being torn between strange and conflicting emotions, and they need the tactful guidance of an experienced adult.

How the Dean Can Help

It is possible, therefore, that the dean may play an important rôle in the lives of these boys and girls by providing for their need of activity, thereby helping them to emerge gradually and successfully as worthy members of society. Her main function in the high school should be to serve as a mother or big sister to the girls in order that she may take the place, as far as possible, of the mother in the home. In this capacity she should seek to provide the means by which every girl may have an opportunity for growth in all the phases of life's experience. She should provide for the development of vigorous health, a clean and sane social conduct, a high standard of morals and a correct mental attitude toward life, and she should encourage the girl to seek a high level of intellectual accomplishment.

To this end she should see that the school sponsors various intramural athletics, as an outlet for physical energies; dances, parties and other forms of social entertainment to give the girls poise and a wholesome contact with boys; excursions, hikes and outdoor parties to broaden their range of social activity and to interest them in the realities of life; various kinds of clubs to encourage hobbies; dramatics, musical activities and literary contests to broaden their esthetic sense, and other activities that contribute toward the building of character and high ideals.

The dean's first step in the execution of such a program should be the organization of a girls' league, composed of all the girls of the school, and through the council of the league and its standing committees she should lead the girls to conduct their own activities and to develop en-

thusiasm for them. For example, there may be a health committee to devise ways and means for the improvement of the girls' health, a committee on school relations to arrange and supervise school parties and anything pertaining to the social life of the school, a service committee consisting of several dependable girls who could assist the dean in following up certain individual cases and promoting personality adjustments. Among other things, there should be a "color contest" committee, athletic in type, which would be responsible for a contest between the girls. The last mentioned project will encourage friendly rivalry between two groups in the girls' league for the highest number of points won for successful work in intramural hockey, basketball, archery, fencing, tennis, track events, various managerships and other official capacities.

Individual Contact Important

The dean, however, should not devote all of her time to the girls *en masse*. After she has made favorable contacts with girls in groups and has learned to know them fairly well, she should try to assist individuals with their difficulties. In this phase of her work she should be ready to help the girls with problems of various types. For instance, she may help the girl who is puzzled in regard to social etiquette, morals, sex, health or scholarship; the girl who has an inferiority or superiority complex; the girl who is interested in boys to the exclusion of everything else, and the girl who is making grave mistakes in attempting to attain a certain type of popularity. The dean should remember, however, that most girls' big problems are more or less trivial and can usually be easily solved. Yet the girls need to talk them over with someone who has had a wider experience than theirs and frequently they find it is easier to confide in an outsider than in a parent or relative. For this reason the dean should be a good listener and should create a feeling among the girls that they may always come to her for advice when they are puzzled.

In order to create this feeling and to learn to know the girls more intimately, the dean may invite them in small groups to tea in her office and may use other devices that will induce them to consider her as a trusted friend. To encourage them still further, she should make her office cozy and attractive, a restful retreat from the hubbub of school life, a place that all the girls will be eager to visit.

We are dealing with individuals who in some cases have lived the greater part of their lives under conditions not always conducive to the development of finest human traits. The dean must

expect, then, to have a few serious problems even in the best of communities and she must be prepared to meet them calmly and tactfully. When she first realizes that one of her pupils presents a problem and before she arranges an interview, she should study the background, causes and probable development of the case. Then, in the interview, she should meet the girl on an equal basis, as a friend rather than as a superior. She should strive to make her feel that her confidence may be given unhesitatingly and that it will not be broken. Finally, in searching for a solution, the dean should remain in the background, but by careful suggestion and tactful leadership, she should suggest to the girl a just and wise course of action. Frequently, problems of a serious nature cannot be solved in a single interview. In certain cases that call for close supervision and help for a great length of time the dean may find it advisable to select a friendly teacher who is especially adapted to assist her in following up a particular case.

As much of the dean's success depends upon the amount of confidence the girls have in her, it is evident that her responsibility for maintaining discipline should be slight. In fact the dean should never impose a penalty upon a girl after she has won her confidence, although she may be able to lead her tactfully to make amends. All cases in which real discipline is necessary should be the responsibility of the administrative office.

The dean's second function in the high school should be that of an administrator, working with the principal, with a rank equal to that of vice-principal. Her administrative duties should lie wholly within those fields in which the interests of the girls are chiefly concerned.

Training for Health

First, she should work in cooperation with the director of physical education in developing a program conducive to the best all-round physical health and moral training. Then, too, she should be conversant with the type of medical and physical examinations given and she should supervise the follow-up cases, seeing that each girl tries to carry out the instructions of the medical examiner. In the larger schools there should be a health director or school nurse to conduct this work in cooperation with the dean. In the schools in which no nurse is available, however, the dean will be required to conduct much of the work of the health department, not only to follow up the medical cases but to take care of all cases of minor illness.

She should be especially well informed in re-

gard to the work done in the science department since the girls' understanding of the principles of health and later their knowledge and understanding of life should come gradually and naturally through the science course. Then, too, she should be accurately informed regarding the work of the home economics course so that she may be satisfied that the work in science and the work in home economics, particularly in regard to health, do not overlap but augment one another. Finally, she should make an analysis of the educational policies of the school and have a definite knowledge of the courses given, in order to obtain a complete picture of the girls' school life.

The Dean as a Vice-Principal

It is important, however, that the dean and the principal be wholly in accord and that they cooperate in all phases of the school administration. The principal should grant his dean all of the authority that is due anyone who holds a position next in rank to his own. The dean, in turn, should earnestly strive to execute to the best of her ability whatever authority she may receive.

Her remuneration as dean should also be in keeping with her relative position on the faculty and should be sufficient to give her freedom to carry out her full program. Her minimum salary, therefore, should equal the maximum amount paid to classroom teachers in her district.

The dean's third function should be that of an educator. She should be interested in research and in educative and professional movements and should be capable of forming educational policies. She should take time to attend a few conferences for inspiration and to cooperate with her colleagues, to travel and to live her own life in order that she may broaden her point of view.

Finally, the dean should function as a woman whom not only children but men and women respect and with whom they feel at home. She should be comparatively young and interested in people. From an educational point of view, in order that she may command the respect of the faculty as well as the pupils by being able to teach a class if she has the time, she should be well informed in at least one academic subject as well as in psychology. She should hold a master's degree. From a professional point of view she should be worthy of the girls' confidence. She should always be ready to help, never to condemn. She should be a leader, optimistic, altruistic and hopeful. She should be convinced of the joys of being a dean, farsighted, seeing the ultimate good and not being hampered by pettiness. Above all, she should be tactful.

Pioneer Women's College Celebrates Its Seventy-Fifth Birthday

Until seventy-five years ago, there was no college for women in the world. In 1855 Elmira College was founded at Elmira, N. Y., by a group of philanthropists who believed women had sufficient intelligence to do work of higher grade than that given in the existing girls' seminaries of that day. This year Elmira College celebrates the seventy-fifth anniversary of its founding.

Elmira College was a college for women from the first and patterned its first curriculum after that of Yale University. It accepted for matriculation to its college course only graduates of secondary schools. Its first graduating class consisted of seventeen members who received the degree of bachelor of arts in 1859, four years after the college opened its doors. From a single, large building, still in excellent condition, Elmira College has expanded and now has twenty buildings, all of the newer ones being elaborately furnished. The twenty-five acre campus is one of the most beautiful in America.

While a number of the then existing women's seminaries have since been expanded into colleges and while other women's colleges have been founded, Elmira College lays particular emphasis upon the fact that it was the pioneer in collegiate education for women. It has proved that women are capable of doing advanced intellectual tasks and has seen collegiate education for women accepted everywhere in the United States and in many foreign countries.—By C. E. Reeves, Professor of Education, Elmira College, Elmira, N. Y.

What Is the Average Teacher Like?

That the average teacher is bourgeois, preferring the music of Irving Berlin to that of Schubert, Mozart or Chopin, caring not for grand opera, choosing the movies or talkies to the drama and finding cheap fiction more to her liking than the higher types of literature, is apparently the conclusion to be drawn from the results of a questionnaire survey made of 1,080 students in fifteen teachers' colleges in various parts of the country and reported in the *Journal of Education*.

The replies submitted in what is believed to be the most comprehensive survey of the teaching profession ever made, just completed by Dr. McLedge Moffett, Teachers College, Columbia University, reveal the average woman teacher to be representative of the substantial middle class of American society.

Why Do Pupils Always Cheer When a Holiday Is Announced?

Is it because the high school has overlooked its chance to create in the minds of its pupils a genuine enthusiasm for the courses offered?

BY H. F. FELIX, PRINCIPAL OF SCHOOLS, FRANKLINTON, LA.

THE truth of a statement often depends upon the amount of experience behind it and the interpretation of that experience, or upon the number of pertinent facts submitted and the interpretation of those facts. I am submitting here only a few facts, since my experience is somewhat limited, but I have gone to school in three states and have been on secondary school faculties in four others. This is the statement I make: I have not yet seen a high school student group that is thoroughly happy and satisfied with being in school.

This is, perhaps, a broad statement. So far however, it has not been my lot to see a group of high school pupils that would not cheer vociferously upon being given a half holiday. They cheer when the heating plant gets out of order, when the plumbing fails to function, when state teachers' conventions take the teachers away for a day and when the Christmas holidays arrive. Without a doubt, there are varying degrees of dissatisfaction. Generally, however, there is not the same degree of contented participation and happy enthusiasm in high school work that exists at the old swimmin' hole, on the football field or in any spontaneous adolescent activity.

Is such an ideal situation possible in the high school? Surely it is possible to a greater degree than exists to-day, else this institution must remain forever a thing of gross inefficiency.

How Pupils Regard the School

Several days ago at our school the bell rang for the end of the noon recess. From my office window I heard one boy remark to another: "Come on, Bill, it's time to go in that old jail." I felt guilty at being connected with such a school. I had, however, put forth considerable effort to make the adolescent "jail" interesting to its inmates. A few days later a near-by high school building in our parish burned to the ground. A first greeting of one pupil to another the next morning, was: "Hurrah, John, no more school; the school house burned up last night." In a way,

such statements belong to youth, but behind them is something significant. I have never seen a rainy day schedule, whereby the school day is shortened an hour or so, received with anything but loud acclaim. Doubtless, the funeral of almost any high school principal would be a happy affair! It would mean a holiday.

I have contemplated the enthusiasms of youth in and out of high school, and the remarks I have quoted here seem to be fairly representative of the state of mind among a large percentage of the pupils in our smaller, and even in our middle sized high schools. The same thing may be true in some large high schools. I do not know. The larger high schools have more money for expanding programs.

The Tools of the New Profession

In the last fifteen years our high school population has increased by leaps and bounds, bringing into its fold many who are not fitted by nature or temperament for high school work or for whom our high schools are not fitted. Nine years ago I started out to become a school administrator. I began as a teacher of mathematics in a fairly large high school in Oklahoma. The first year was a year of adjustment for myself; the second was a year of wondering what was wrong. The majority of the pupils in my classes did not respond properly; the lessons went over their heads; they were unenthusiastic, inert. Mathematics was abstract, cold and beyond the pale of their youthful enthusiasms. It was an annoying situation to me as a conscientious teacher daily to give of my energy to the last drop and not to be able to make young Milnes out of each and every pupil under my tutelage. I wondered if school was meant to be like that. I did not believe so. I do not believe so yet.

At that time I had heard only vaguely of school science: of I. Q., of mental age, case method, vocational guidance and personal aptitudes. Since that time I have heard much of these things, have learned their meaning and have studied them

seriously. I have become conscious of the need for allowing for two more factors or "quotients," D. Q. and A. Q.—"Determination Quotient" and "Ambition Quotient." These are the tools of the new profession. I feel that in them and by them we must find the answer to the question. What must our high schools be like to fulfill efficiently the needs of all boys and girls who apply to them in increasing numbers for more learning?

A Partial Answer

I believe I saw a partial answer two summers ago at Eau Claire, Wis., when the superintendent there showed me through his high school plant. In one section of the building were an automobile repair shop, a machine shop and a woodworking shop. In another section was a print shop. I was shown departments in which were taught business subjects, cooking, sewing, homemaking, art, architectural and mechanical drawing, several of the pure sciences, and, among all these, the straight academic or college preparatory department. There were courses that would appeal to many types of pupils.

It seems to be the college preparatory courses that our high schools persistently cling to, with sad results to the best training of the majority of our high school boys and girls. It is this condition that we must largely blame for filling our colleges with failures and misfits. The thousands of misfits in college go there to obtain the knowledge they need to enable them to make a living. If the high schools had offered this to them in the first place, they would never have placed themselves, perhaps, in a position to have their pride and self-respect crushed by their failure in the highly specialized college courses for which they were not fitted. Many of the misfits who do not go to college go into industry, unprepared, and fail there.

But what of courses in high school for electricians, barbers, beauty parlor specialists and salesmen? What of the psychiatrist, the psychologist and the trained vocational counselor in the high school? Could they not save heartaches and unhappiness to humans and dollars and cents for the commonwealth?

The recent investigation of Shannon into the post high school successes of graduates in Terre Haute, Ind., published in the *School Review* for November, 1929, brought to light facts indicating that whatever is necessary for success in the high school is not the factor that is requisite for success in life.

An important research bulletin recently published by the National Education Association says that the school must change from a formal insti-

tution dealing out a few pellets of knowledge to one that offers an opportunity to prepare for life. In an article in *The NATION'S SCHOOLS* for January, 1929, Franklin Bobbitt, one of the leading authorities on the curriculum, states that high grade living is the object of education.

Until our high schools have been changed to fit the needs and abilities of all groups and until these groups are fairly well determined, we must not stand abashed at a lusty cheer for a suddenly announced holiday from the grind. We, as principals, must harden our tender sensibilities against the thought that our funerals would be happy ones if they took place while school was in session. At least we must harden these tender sensibilities until the time when there will be as much money available for school purposes as can be spent profitably.

In the meantime, if I were the director of some great endowment I should be tempted to begin the experiment of building up a high school in which adolescents would find their greatest interests and in which there would not be the tendency to cheer the approach of a holiday. To a few pupils the school is interesting and they are sorry when they have to leave. Why are there not more such pupils? Is it not because the majority are glad to get away from their half-way successes? Is it not because our high school courses have failed to create real interest, genuine enthusiasm in the ranks of the average, present day high school pupils?

Council on Building Problems Plans Practical Program

A council has been formed to help educators in adapting their building program to their educational needs, according to Alice Barrows, specialist in school buildings, United States Office of Education. The group is known as the National Advisory Council on School Building Problems.

The purpose of the council is to secure comprehensive data on methods of solving school building problems in various parts of the country and under different types of school organization, to make expert analysis of the data collected and to develop constructive suggestions in regard to methods of school building problems. The council is to act as a clearing house to show how problems are being solved in various sections.

William John Cooper, commissioner of education, is chairman of the council for the coming year; S. M. N. Marrs, state superintendent of instruction for Texas, is vice-chairman and Miss Barrows is secretary.

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The University of Wisconsin, Madison, Wis.

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Editorials

How Can Private Wealth Best Serve Humanity?

A PATRON of the Center of Psychological Service, Washington, D. C., who has practically decided to donate \$10,000,000 to the promotion of human welfare, has asked the question: "How can private wealth best serve humanity?" He wishes advice regarding the purposes for which he should make his endowment.

A canvass is being made of the views of a number of persons throughout the country who are engaged in the study of the advancement of human well-being in one way or another. The NATION'S SCHOOLS has positive convictions regarding the answer that should be given to the benefactor's question, and these convictions are presented here. Perhaps some readers who have not received an invitation to suggest a program for the wise expenditure of \$10,000,000 may wish to send their views to the Center for Psychological Service, 1835 Eye Street, N. W., Washington, D. C.

We hold that general education in all its ramifications should be cared for by the community, the state or the nation. Private wealth should not be used for the building of additional schools or colleges of existing types. There are plenty of opportunities now for boys and girls and men and women to secure elementary, secondary and higher education. Private wealth should not be expended for the education of backward or unfortunate children. The state is now making or should make adequate provision for them.

A gift of \$10,000,000 could best be used in our country to-day for the encouragement of research in the social sciences. The states are not providing adequately for research of this character. Neither is the nation. Research in the physical and medical sciences is being supported much more generously than is research in the social sciences. Many of the great industries are providing abundantly for research, each in its particular field. It is not at all likely that the support now being given so generously to research of this character will be withdrawn. Generous gifts are being made also for research in the field of medicine. Since both the states and the nation appreciate the importance of investigation pertaining to the promotion of health

and the control of disease, research in both the physical and the medical sciences is going forward steadily.

Until recently no one has thought that research in the social sciences could be made to yield accurate, tangible or valuable results. At the present moment, however, sufficient evidence is available to show that research can be carried on accurately and profitably in education, in sociology, in economics and even in religion. Because the states and the nation have contributed practically nothing toward the support of research in these fields, they have lagged far behind the medical and the physical sciences. If adequate support could be secured, however, there are enough trained workers ready to engage in research in these fields to secure good results without prolonged delay.

The best way to encourage research in the social sciences would be for the benefactor to give \$1,000,000 to each of nine institutions best equipped in men and in attitude to undertake research in education, economics, sociology or religion. The income from the fund should be spent partly to maintain special investigators and partly to provide scholarships for especially qualified graduate students who would devote their time and energies during their period of graduate study to investigation in one or another of the social sciences. In this way nine institutions could provide for three or four special investigators and fifteen or twenty superior graduate students.

The income from \$1,000,000 should be devoted to organizing the results of investigation being carried on in different institutions and especially in the nine institutions to which a special grant for research has been made. The income would be adequate to provide for the regular publication in popular form of the results of investigation in all the social sciences. This work of organizing and publishing results should be under the direction of a committee composed of social science investigators in the different institutions in which important research is being accomplished.

The aim of research in all the social sciences should be to secure unbiased data relating to social problems and to make possible the dissemination of popularized and unprejudiced information regarding the effects upon human well-being of various policies and practices—for instance, prohibition, the education of children of preschool age and the segregation of boys and girls in the schools after the advent of the teens.

A benefactor should not contribute his funds for the building of a new research institution or

for a new school that would segregate superior children or any other special group. Institutions already in existence are adequately equipped with buildings and apparatus to conduct useful research in the social sciences, provided investigators and advanced students can be maintained. A \$10,000,000 endowment fund should not be used for adding material resources to the educational institutions in America. Our material equipment has far outrun our equipment in special talent.

Articulating the Segments of Our Educational Organism

AN EXAMINATION of educational programs, national and local, reveals the fact that articulation is regarded as a supremely important problem in American education.

A lively discussion of the problem took place recently at a Middlewestern educational conference. The debaters were trying to find a way to bridge the gap between secondary and higher education. A representative of secondary schools gave a number of concrete instances showing that pupils who go to the university from the high schools encounter such obstacles, put in their way deliberately or carelessly, that they are diverted from their ambition to go on with their education. It was claimed that those responsible for the policies of the university plan their programs without much regard to the programs of secondary schools. Consequently, there is a conflict and there is a waste of time and energy on the part of a large proportion of students during the first year or two in college. The secondary school representative demanded that the college adjust its entire régime to the program of the secondary schools.

A representative of the colleges pointed out what he believed to be the shortcomings of the secondary school. He maintained that when students entered college they were unprepared for college work, and that the college had to begin practically *de novo* to get students into ways of thinking and working so that they could pursue a college program. Thus the debate went on without much yielding on either side.

Exactly the same difficulty of articulation exists between the junior and the senior high school. The senior high school constantly complains that the junior high school is doing more harm than good by cultivating habits in pupils that unfit them for effective work in the senior high school. Those who are determining junior high school policies say that they understand better than do

senior high school policy makers what is suitable and valuable for pupils of junior high school age. They hold that the senior high school should adapt itself to the program of the junior high school.

Until recently teachers in the first primary grade complained about the failure of the kindergarten to prepare children for first grade work. The situation in this respect has been improving until now one hears little about conflict between the kindergarten and the first grade. The gap there has been bridged. Will it be possible to bridge the other gaps? They cannot be bridged unless each division of the educational system can build its program on what has gone before. The senior high school condemns the college because the latter works out a program without due consideration of what the high school is doing. At the same time the senior high school lambasts the junior high school because the latter does not work out its program along the lines prescribed by the senior high school.

Our educational system cannot be made a unity, which is the dominating ambition now of educational leaders, unless the kindergarten is permitted to do what seems best for the kindergarten age and the elementary school is willing to start where the kindergarten has left off. The junior high school must start where the sixth grade leaves off; the senior high school must start where the junior high school leaves off; and the college must take the pupils where the senior high school leaves them and go on with them. Any other policy is bound to cause gaps.

The Preschool Movement

DOUBTLESS many readers of *The NATION'S SCHOOLS* can recall the days when the kindergarten was in the experimental stage in America. In those times there were no kindergartens supported at public expense. It was generally said and believed by most persons that children should be trained in their homes until they had reached the age of six or seven. It was claimed that the mother was the only competent teacher of the child during its first five or six years because she alone could understand him and be sympathetic with him; he would be timid in the presence of a stranger and would be over-excited if he attended school for two or three hours a day with other children. Taxpayers proclaimed vehemently that it was not the obligation of the community to provide schooling for children before they reached the elementary school age.

But the kindergarten is now a part of the public educational system in many communities throughout the country. A mother who wishes to send her five year old child to school can find a near-by kindergarten maintained at public expense in most of the cities. There is no longer any debate as to whether or not kindergarten facilities should be maintained from funds devoted to the support of public education. There is no longer any doubt that many children would be better off for two or three or four hours a day in a well conducted kindergarten than they would be in their own homes.

The experience of the kindergarten is mentioned because the preschool movement is now passing through exactly the same stages that the kindergarten passed through in the beginning of its career. Preschool education is still in the experimental stage. It is being supported largely by great educational foundations, although groups of families are maintaining private nursery schools in many communities. The conviction that the community ought to provide at public expense for preschool education is becoming widespread.

Of course, there are objectors who will say that a young child belongs in the home and not in the school; that during the earliest years a child should run at large and not be corralled into a school with other children; that only the mother understands a two and a half year old child; that the community cannot afford to take care of young children for parents; that the physical welfare of the child is imperiled if he is placed with a dozen other children for two or three hours a day. These and other objections were all urged against the kindergarten and they have all been answered. They are being answered also in respect to preschool education, though it is still in the experimental stage.

The experimental work that has been going on for a decade and a half has shown that the child is better off physically for two or three hours a day in a well conducted nursery school than in his own home, allowing for some exceptions. It has been shown that a child's social attitudes are pretty largely determined by his fifth birthday and that the typical home to-day is not equipped to provide the right sort of social experience for a child. It has been shown that some of the habits contracted in the home that greatly interfere with the child's wholesome development later on, can be avoided and even overcome in preschool education. The conductor of a nursery school understands child nature better than does the typical mother or father, neither of whom have had any special training for parenthood and who have

to depend upon their natural impulses in training children.

There is abundant evidence to show that when a young child is provided for according to his nature and his needs in a nursery school, the mother of the child learns useful lessons from the preschool trainer and so the home becomes an ally of the school.



Neither Will the Colleges Be Immune

DURING the past year there have been several articles and editorials in *The NATION'S SCHOOLS* calling attention to the reconstruction of the curriculum in the elementary and high school that has been in progress for several years and that is going forward more vigorously now than at any time heretofore. No mention was made in the articles and editorials of revision of the college curriculum. A few days ago a reader of this magazine, a professor in a prominent college, wrote to the editor to express his hope and his belief that the "destructive movement sweeping over the country will not reach up to the college." "We need," he wrote, "to have some stable element in our educational system so that what has proved valuable in education will not be replaced by fads and whims and flabby educational sentiment."

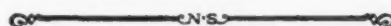
Following this letter came an article written by Dean Edward Wilber Berry of Johns Hopkins University, one of the most conservative of higher institutions. His views of the uselessness of many of the college courses go beyond anything that has been presented in *The NATION'S SCHOOLS*. For the benefit of those who think that college men generally are content with the traditional curriculum, two or three paragraphs may be quoted from Dean Berry's article in the *American Magazine*:

"We know that a boy who is going in for science and comes to realize that he can get nowhere without a good reading knowledge of French, can acquire it in seven weeks. . . . Yet, we have college students in America who take French three hours a week for years and then have only a fair reading knowledge. . . ."

"Many of our most hidebound notions about the curriculum are the results of accidental happenings back in the sixteenth century. . . . What the ordinary curriculum to-day represents is simply the accumulated debris of the past three or four hundred years of hit-or-miss instruction. . . . Some of it is plainly superfluous and some of it should be dismissed immediately as the merest flubdub and flapdoodle—inherited rubbish.

"As for the undergraduate. . . . He is the product of the stuffing machine—crammed with facts, with information of a more or less unrelated and useless nature. . . . When he has poured back enough to score his points, he is branded with an A.B., and put on the market as a pure product. . . . It is a mere label—a standard bonded label on a bootleg bottle. . . ."

President Glenn Frank of the University of Wisconsin has recently intimated that soon the first two years of the traditional college course will be completely reconstructed. The experimental college at the University of Wisconsin is testing the feasibility and desirability of remodeling freshman and sophomore work from bottom to top. Antioch College, Yellow Springs, Ohio, is demonstrating the possibility of conducting college work along altogether different lines from the formal disciplinary program that has come down to us from earlier days. These facts are mentioned here, not for the purpose of endorsing any particular plan for the reconstruction of higher education, but only for the purpose of pointing out to those who think and hope that the college can go on its way unmolested by the reconstructive forces operating in elementary and secondary education, that the enemy is already at the campus gate and the college will have to justify its traditional program on some other grounds than that formal, symbolic studies are valuable for mental discipline and the training of character and so should constitute the *pièce de résistance* of the curriculum.



Are Schools Becoming Centers of Lawlessness?

AT a recent conference of social workers, including juvenile court judges and attachés, the view was expressed that one cause of the increase of misdemeanors by children in the teens and under is the relaxing discipline of the schools. It was said that children are running loose in the schools, behaving about as they want to, and that they are acquiring lifelong habits of disorderliness and lack of conformity to proper rules and regulations.

Foreign visitors have criticized our schools sharply for the same reason that social workers have criticized them. When foreign persons, who are acquainted with the rigid discipline of the schools in most foreign countries, visit an American school and see children going about quite freely, often without asking permission and frequently leaving one class when they have had enough of it to go to another, the observers think

that we are carrying the matter of freedom to a dangerous extent.

The most distinguishing characteristic of American education during the past three decades has been the freedom granted to pupils in the schoolroom. We have been working on the belief that to train a pupil for the kind of democracy we have in America is to grant him freedom to regulate his own behavior, on condition that he will do his work satisfactorily and will not disturb his classmates. The Dalton plan has carried this program to the limit. It is significant, however, that the Dalton plan is making headway faster in England, in Japan and in Germany than it is in America. The leaders of educational thought in these older countries have reached the conclusion that the rigid discipline of pupils does not prepare them adequately for self-government in maturity. Some of our own people think that our plan is not training young people adequately for self-government.

There are so many conditions to-day in American life that incite disorderliness in the young that to ascribe it all to the freedom of the school is absurd. So far as data have been secured from unprejudiced investigation of the situation, the school is a safeguard against the kind of misbehavior that is cultivated on the streets and in some of the amusement places generally patronized by the young to-day. As careful a study as possible was made in a survey of the schools of Newark, N. J., and the conclusion was reached that the more time that the pupils spent in the school the better behaved they were outside of school.

Children and Homework

THE commissioner of health of New York City is urging that pupils in the public schools should not be required to prepare any studies at home. He is urging, further, that the school day should be cut down, for pupils in the lower grades at any rate. His recommendations are meeting with approval from school authorities and apparently from patrons of the schools.

One could predict that such recommendations would be received with applause in most communities, since in America we are inclined to make all necessary sacrifices in order to conserve the health of our children. In view of this, we have concluded, without much evidence to support our belief, that life in a schoolhouse imperils health and that application to intellectual tasks is a menace to continued physical and nervous vitality and stability.

In a recent survey of the schools in Newark,

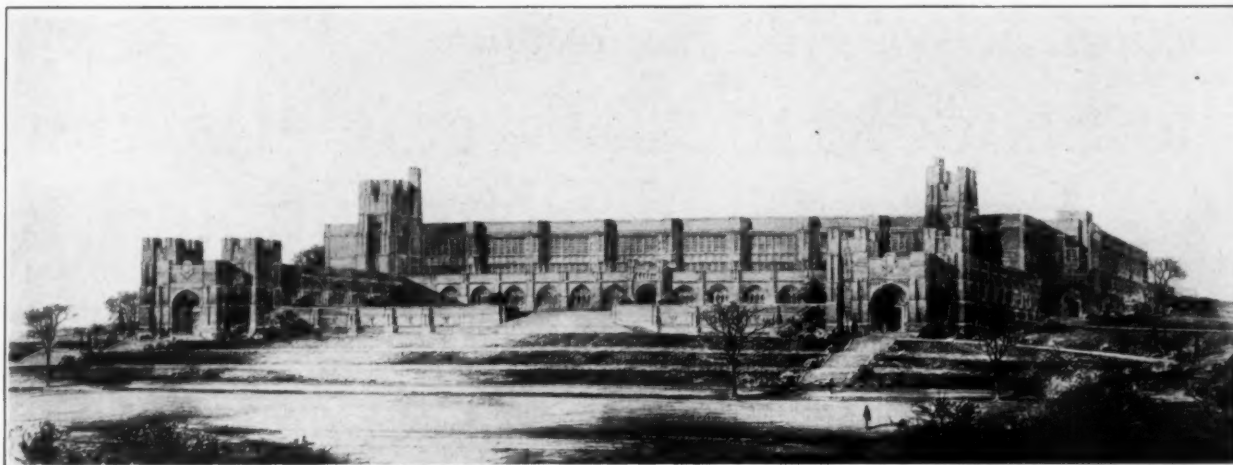
N. J., it was found that the health of the all-year school children was at least as good as the health of children who had a long summer vacation. It was believed by those who examined the evidence, that children who were in school all year, with brief vacations, had better health than the children in the all-year school sections who were on the streets for two and a half months during the summer. The all-year schools promote rather than injure the health of the pupils.

The layman takes it for granted that children chafe under school restrictions. This may be the case in some places, but it is probably not the rule. It may be within reason to say that, in the congested sections of all our cities, children would rather be in school for several hours every day than be at home or on the street or even on the playground. Some readers will vehemently deny this view, without any doubt, but we have accurate data in support of it from at least one more or less typical American city.

The suggestion that children should not take their books home for study out of school hours will be approved by a large proportion of parents and teachers. But this applies, of course, to the youngest children. When a child reaches the fifth or at least the sixth grade, he ought to devote some time in the evening to intellectual pursuits. If he has no school tasks to perform, the chances are that he will be discontented if he is required to stay at home and read, practice music lessons or participate in the conversation of his parents and guests. Many parents do not dine nowadays until seven o'clock in the evening, and they dance, play bridge or go to the theater after they have had dinner.

The conception of the American home as a center for interesting and illuminating conversation between parents and children in the evening, for the enjoyment of music or for reading the world's great books is pretty largely an illusion. If boys and girls, ten years of age or older, have no definite school tasks to perform during the evening, then the chances are that they will be off to the movies, to the dance or pool hall or joy riding. These activities are too exciting and overstimulating for most young persons. They would be better off if they were performing intellectual tasks at home.

It is not advocated here that the school shall load pupils so heavily with school tasks that they will be required to work several hours every evening in addition to a long school day. An hour's work after the evening meal for children in the fifth, sixth and seventh grades, and one and a half or two hours for older children would not be excessive provided, of course, the children have a suitable place at home for their work.



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Practical School Administration: The School House Organ—Its Plan, Printing and Distribution

BY PHILIP LOVEJOY, ASSISTANT SUPERINTENDENT OF SCHOOLS, HAMTRAMCK, MICH.

SEVERAL years ago when the public school system of Hamtramck, Mich., was reorganizing, those in authority thought it desirable to devote considerable attention to the public school relations problem. The code provided for two assistant superintendents, one to be in charge of instruction and the other to assume the duties commonly assigned to the business manager and to become a complement to the instructional program by supervising financial details, child accounting activities and the informational service.

In the field of informational service a complete study was made and it was decided that, out of a multitude of openings, the public school house organ should be established first. Accordingly the assistant superintendent was asked to make a survey of the field the house organ would serve and of methods for making it effective.

The first problem that presented itself was the name of the house organ. Two things were certain. It must include the name of the city and the words "public school." The name of the city must be used because it was desired to make the name and the location of the city familiar to all. The words "public school" were used, because many unique plans would be developed in the instructional field and it was felt that the country should know that the work was being accomplished by a regularly appointed school board spending public tax funds and not by a special foundation endowed privately. The third part of the name presented a problem. Should it be Messenger, Bulletin or News? A careful study revealed that the publication would be a bulletin of the events of the school system and, while many other systems used the same word, no other could be found that would better express the aims of the publication. Therefore "Bulletin" was chosen.

The system was rapidly becoming so large that personal contact could not be had daily or even monthly between the members of the entire organization and the bulletin was to develop an *esprit de corps* among the members, besides carrying official notices and news of special and general accomplishments in the field of education,

both locally and nationally. It was to be first and foremost an inspiration and next a magazine of news and announcements.

One of the knottiest problems was to determine the size of the proposed bulletin. It must not be so large that it would be unwieldy. It must not be too small. It must be adapted to taking a photo engraving that would give sufficient detail and yet not be too large. It must be of a size that could be mailed easily and yet that could be bound at the end of the year into an attractive book. A 6 by 9-inch size seemed to fit these demands best, with a 5 by 8-inch printing area.

A great deal of attention was paid to the typographical layout. The maximum amount of material must be published in each issue but it must not appear crowded. It must be readable. It must be attractive.

Typography Is Attractive

The first issue was set in 8-point Roman old style. The columns were fifteen ems wide with a hair line down the center. Headings were 8-point and 10-point capital letters. There was no dress to it. A style was decided on and rigidly adhered to. The maximum amount of material could be published with the Ionic type face. It was decided that a 7-point Ionic on an 8-point base would best accomplish this. This gave an additional line over the 8-point type on a 9-point base and was actually more readable. Columns thereafter were set fourteen ems wide with a pica space between them. Headings for a page story were put in 18-point Century bold, upper and lower case, while the smaller heads were scaled down in this same type family to 14, 12 and 10-point. The Ionic family lent itself admirably to the tasks imposed. Quotations could be placed in as small as 5½-point and still be read easily.

The editorials were always placed in 10-point on a 12-point base and were twenty-eight ems wide. This gave them a dress. They were always signed with a signature cut of the superintendent. Page three was designated as the editorial page.

The tickler position under the masthead car-



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H O R L I C K ' S

ries a number of short inspirational articles usually in the regular size type. Poetry is always set in 7-point Ionic, ten ems wide, so that it may be dressed up in an attractive box. Each article is headed with a two-line initial and italics and bold face are used whenever necessary.

It was decided that a white paper would be best. Paper that would take half tones was desirable and not too expensive. Frequently zincs would be used. After much experimentation a 140 supercalendered paper was chosen. While this would not dress up an annual, for the purpose in question it was admirable. It takes a fine line cut and it is not so glossy as to cause any eyestrain.

Pictures speak a universal language and at the outset it was decided that many cuts should be used. To save expense, these have all been made on zinc in a 100-line screen so that they may be lent to local papers. More recently a special process with a sandpaper base is being used to enhance the dress of the cuts.

A decision made by the editor was that all cuts should picture children, that rarely should more than three children be shown and then always in a pose of activity. Every picture that appears in the bulletin carries a message of action. Each picture shows what children are doing every day in the classroom. They are in detail so that the reader may easily see what the picture is meant to portray. In this way pictures have been doubly valuable to the bulletin.

The same cover design is maintained each month. There is no mistaking the advantages of repetition. The original design was a composite made by three Polish pupils in the high school art classes. The design has been varied each month by a change of the second color which has been made appropriate to the month in point.

A Cooperative Undertaking

At the outset it was determined to make the bulletin a cooperative undertaking. It was not to be the headquarters publication. It was to be representative of the entire system. The staff was organized, with the superintendent of schools as the editor in chief. This must naturally follow in a unit system. The assistant superintendent in charge of the information service was made managing editor—the one upon whom the details of the publication were placed. Each department in the system then appointed one representative to the editorial board. News is secured in each building or department by the building editor. Pictures are obtained by this editor. The editor writes one editorial a month and sends such notices as may be necessary. The managing editor

secures a unity to the publication and makes suggestions in the monthly staff meetings. The staff actually does the work. After material has been received in the monthly staff meeting, it is assembled by type and each type is returned to some member for editing and culling. Two days are given to this and the material as finally returned is usually published. The managing editor reserves the right to unify the entire collection for the purpose of making a more complete bulletin.

Originally the bulletin was made entirely impersonal in its writings. Later it has been found wise to assign authorship in certain cases where special articles have been prepared. This is done in instances of articles about special projects that are being worked out or in case of a trip to Europe.

Printing Is Done in the School Shop

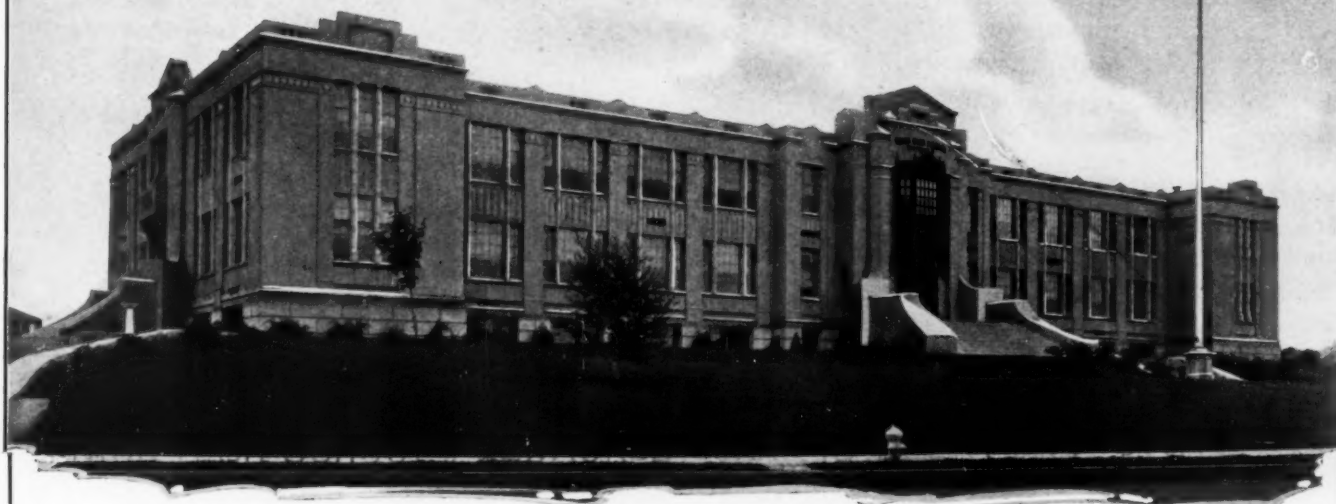
Names are essential and each month sees the names of many teachers included in the publication. The unimportant happenings of the system are not mentioned just to get a name in print, but a notable project is described by the building editor and the teacher responsible for it is given credit in type.

Material is finally typed by the public relations clerk and is sent to the linotypers "clean." The linotyper sends the copy back in the same fashion and rarely is it necessary to send for correction lines. In the year and a half of the bulletin's existence, this has happened less than ten times for as few lines. This means that it is worth while to secure a competent typesetter.

Hamtramck, like most schools of its size, has a school print shop. All material used in the system is printed in the shop. As much as possible is done during school time to give practical experience to the boys and to keep them in touch with ever changing ideas. When it is impossible to finish the publication on school time, the boys are asked to remain after hours and print the bulletin on an hourly rate basis. Last summer while the instructor was on a vacation, three of the high school boys printed, folded and stitched a twenty-four-page booklet, of which 5,000 copies were printed. The final booklet was a credit to the self-direction of the pupils.

At the beginning of the semester the staff, which changes once each year, is organized. A printed list of closing dates is arranged and each member knows exactly how to have a picture taken and used in the bulletin. A schedule of dates for the present year is presented. General instructions are given to each editor for securing news both for the bulletin and for the local papers. The monthly meeting, thereafter, becomes

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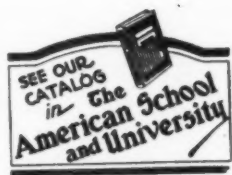
MAKE it a point to visit some of the schools where PEERVENT Units are in use and see for yourself how quietly and efficiently these units operate under varying conditions—It will be a revelation to you—Also, remove the front panel from one of these units and look inside—see the new PEERFIN Radiator—the silent-running motor—the air filter—the mixing damper. Then you will realize that PEERVENT Units are more than mechanical equipment.

PEERVENT Units have a proven durability. Units built and installed 18 years ago are still in use and operating satisfactorily.

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The public relations clerk sees that all bulletins are distributed. She counts the number for each building and sends them out through the school delivery service. Every teacher, clerk and custodian in the system receives a bulletin free. All educational magazines in the country are on the list, as are all the leading periodicals and magazines. Superintendents in cities of 50,000 or over are on the list as are members of the local Rotary club, the Exchange club and the Board of Commerce as well as other interested citizens. Any person applying by letter to the managing editor is immediately placed on the free list. In some cases college professors have asked for extra copies for use in their public relations classes. These requests have all been granted.

All bulletins are mailed under the new regulations of the postal department permitting a bulk rate of twelve cents a pound with a minimum of one cent a copy. The editor obtained a permit from the local post office and the printer ran the envelopes through the printing press with the proper insignia. Thus no stamps are necessary. The public relations clerk sorts the final envelopes as demanded by the postal authorities and delivery is thus expedited.

Bulletin Is a Success

The cost of the bulletin is borne by the board of education from public funds. No advertising is sold. The entire bulletin is devoted to school affairs. The ultimate cost depends on the size of the bulletin and the frequency with which it is issued. The Hamtramck Public School Bulletin appears on the first of each school month. It averages sixteen pages an issue with frequent issues carrying twenty pages. Paper for the year costs about \$125. Linotyping costs about \$800 for the English printing and \$200 for the Polish. Photography costs about \$300 and the engraving budget has been placed at \$400. Special mats are allotted another \$50. Printing overtime for the boys is placed at \$300 and mailing charges run about \$150. Binding the volumes at the end of the year takes another \$100. Special features absorb another \$100. Thus the cost of the bulletin for the year runs around \$2,475 not counting the salaries of the assistant superintendent and the clerk, both of whom devote the major portion of their time to their parts of the school system. The present print order is 1,300 monthly. It should be noted that many of the cuts used in the bulletin can be used in the annual report and home contact bulletins; hence the cost is really somewhat less.

Teachers report favorably on the bulletin. The

building editor, being close to the situation, gets first-hand reports on what is desired. Requests come from various sections of the country for the bulletin and reprints are frequently made. The teaching techniques of the teachers have shown noticeable progress, an advance to which the bulletin has doubtless contributed. The local situation is better and other cities have learned what Hamtramck is doing. The bulletin is a decided success.

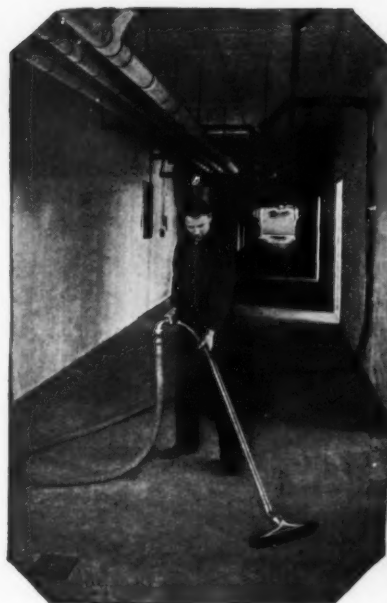
Removing Acoustical Defects From Auditoriums and Other Rooms

Irregular areas in walls and ceilings of auditoriums will scatter reflected sound and help to prevent reverberations, according to a recent statement by the Bureau of Standards, made public by the Department of Commerce. The usual acoustical defects of auditoriums are echo, dead spots and reverberation. Reverberation, including echo, which is a particular kind of reverberation, is a serious defect since the prolongation of one sound such as a musical note or spoken syllable, may interfere with the next sound, producing hopeless confusion. This is likewise a difficult defect to remove, and should be prevented by foresight in construction.

Circular halls and smooth, hard finished walls should be avoided. Surfaces, such as the ceiling and even the proscenium arch in theaters, should be broken up into irregular areas which will scatter the reflected sound. Dead spots and sound foci result as a consequence of reverberation-producing conditions and may be treated in the same way. Balconies often require special treatment, and if low and deep are almost certain to be unsatisfactory.

A certain amount of reverberation, or prolongation of a sound, is desirable provided the reverberation does not last long enough to interfere with the next succeeding sound. Rooms of certain sizes are best for certain purposes. Thus a theater should be of moderate size, while an auditorium for musical numbers may be much larger. In case an orchestra is reinforced by an organ, due allowance must be made. Great care should be taken in selecting the interior finish so as to reduce the reverberation time to a proper acoustic value.

Principles of acoustics that need to be considered by builders are dealt with in a circular, copies of which may be obtained from the superintendent of documents, Government Printing Office, Washington, D. C., at a cost of five cents each.



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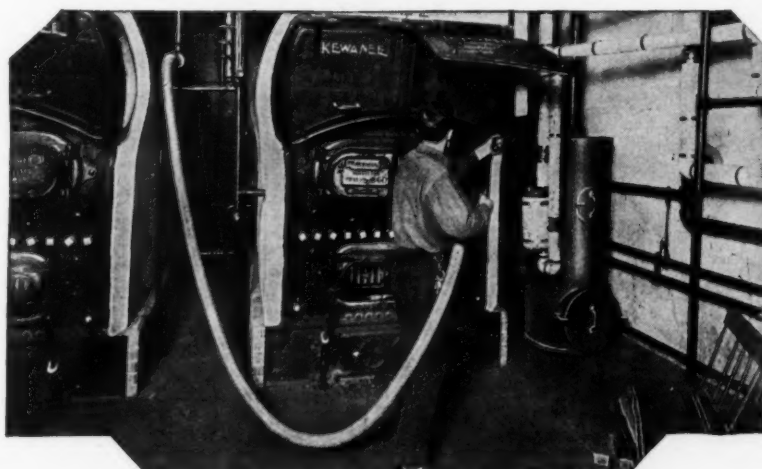
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Your Everyday Problems:* Improving the Daily Schedule of the One-Teacher School

BY JOHN GUY FOWLKES, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN

DESPITE the marked trend toward consolidation of schools and the general tendency to increase the size of schools, a large number of one-teacher units still remain.¹ These one-room schools are expected to give the same general type of educational training as is offered in the larger school systems. At the same time, it has been discovered that many of the details of organization and administration of one-room schools differ in nature from similar details of the larger school units.

*Discussions in this department deal with problems that frequently confront principals and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

¹ This discussion is based on an analysis of the daily schedules of 666 one-room schools in California. I am indebted to James Willard Canfield, whose master's thesis at the University of California, 1927, contains a detailed report of the study. The title of the thesis is "The Daily Program in One-Teacher Schools in the State of California."

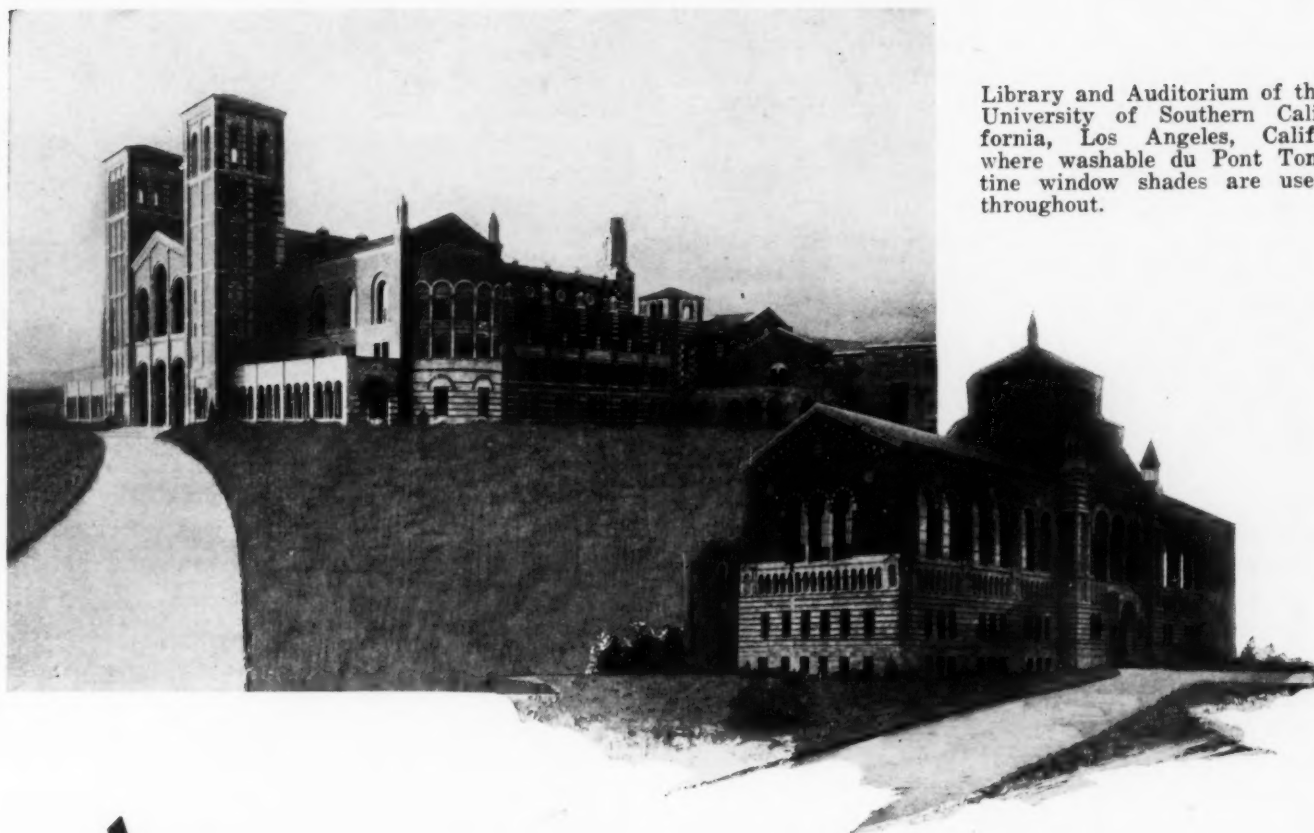
One of the most perplexing problems in the one-room school is the matter of the daily schedule. This problem of the daily schedule in the one-room school is recognized in the manuals of many of the state departments, county superintendents and educational writers. Some of the best work that has been done in this connection may be found in the following county and state manuals: Ventura County (California) Course of Study, 1925; Alaska Manual and Course of Study for Elementary Schools, 1923; Montana State Course of Study for Rural Schools, 1926; Texas State Manual and Course of Study for Elementary Schools, 1924-25; Wisconsin State Course of Study, Elementary Schools, 1923.

Publications on the subject include: "Everyday

Begin Time	Grade	Class Instruction	Teacher - Pupils	Study Program				
				I	II	III-IV	V-VI	VII-VIII
9:00	10	All	Opening Exercises	Current Events - Morals and Manners - Health Talks				
9:10	15	1	Reading		Word Study	Reading	Health Work	Geography
9:25	15	2	Reading	Seat Work		Spelling	Geography	Agriculture
9:40	15	3-4	Arithmetic	Black Board	Read.-Wd.Stdy			
9:55	5	All	Rest Period	Free to move about - leave room - sharpen pencils				
10:00	15	5-6	Arithmetic	Seat Work	Read.-Wd.Stdy	Arithmetic		Library Read.
10:15	15	7-8	Arithmetic	Paper Cutting	Paper Cutting		Arithmetic	
10:30	15	All	Play Period	General Supervision				
10:45	15	1-2	Language ⁽³⁾ Nature ⁽²⁾			Libr. Read.	Arithmetic	
11:00	15	3-4	Reading	Sentence Work-Nature Study- Construction Work				Arithmetic
11:15	15	5-6	Reading ⁽³⁾ Spelling ⁽²⁾	Dismissed		Reading		
11:30	15	7-8	Reading ⁽³⁾ Spelling ⁽²⁾				Reading	
11:45	15	3-4	Language				Spelling	Reading
NOON								
1:00	15	5-6	Language	Black Board	Health Work	Language		Reading
1:15	15	1	Reading ⁽³⁾ Numbers ⁽²⁾		Pictures		Language	Spelling
1:30	15	All	Writing ⁽³⁾ Art ⁽²⁾	Music divided into two groups if necessary - Writing and Art individual instruction - Art may include drawing or industrial work				
1:45	15	All	Music ⁽³⁾ Art ⁽²⁾					
2:00	5	All	Rest Period	Free to Move About				
2:05	10	2	Phonics ⁽³⁾ Numbers ⁽²⁾	Pictures		Health Work	Language	Health Work
2:15	15	7-8	Language ⁽²⁾ Agriculture ⁽²⁾	Health Work	Read.-Numbers			
2:30	15	All	Play Period	Dismissed				
2:45	15	3-4	Reading ⁽³⁾ Geography ⁽²⁾				Libr. Read.	Language
3:00	15	5-6	History ⁽³⁾ Geography ⁽²⁾				Geography Nature	
3:15	15	7-8	History Civics				History	
3:30	10	3-4	Spelling ⁽²⁾					History
3:40	20	5-6	Hygiene				Dismissed	Civics
3:40	20	7-8	Geography ⁽³⁾					Geography

Numbers following names of subjects indicate number of recitations per week.

This schedule illustrates the proposed program for one-teacher schools in California.



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Problems of the Country Teacher," by Frank J. Lowth, The Macmillan Company, New York, 1926; "Rural School Management," by W. A. Wilkinson, Silver Burdett and Company, New York, 1917; "A Handbook for Rural School Officers," by N. D. Showalter, Houghton Mifflin Company, New York, 1920; "The Organization of the One-Teacher School," by Edith A. Lathrop, Rural School Leaflet No. 10, February, 1923, Bureau of Education, Washington, D. C.; "Analytic Survey of State Courses of Study for Rural Elementary Schools," by Charles M. Reinhoehl, U. S. Bureau of Education Bulletin, No. 42, 1922.

The basic consideration in the construction of the daily schedule for the one-teacher school is the plan that is to be followed with respect to grade and time organization. A survey of state courses of study shows that the movement toward the grade alternation plan is growing rapidly. Eight states and the territory of Alaska make provisions for grade grouping or grade alternation by years. Two states, Oregon and Texas, provide for a partial grouping plan, in which certain subjects are given to more than one grade. Six states still adhere to the eight grade organization, but have changed the type of program that is in use.

One of the best discussions and examples of the new type program is found in the Manual and Course of Study for the Elementary Schools of Alaska, 1923, page 28. The following quotation is presented because it explains definitely the alternation plan:

"The arranging of a daily program in a one-room school with a number of grades represented is a difficult and important matter. The tendency among teachers is to provide for too many classes which necessarily reduces the recitation period for each class. If possible, the program should not include more than twenty or twenty-five classes. This is possible through the alternation and correlation of studies.

Alternation of Classes Defined

"Alternation is the systematic and regular union of two grades of pupils, both grades doing the work of one year in one class while the other's work is omitted. The next year the work omitted is taken up and the first year's work dropped. In this way each pupil does all the work of the course, but not all in the same order. The number of classes is greatly diminished, the recitation periods are lengthened and more efficient work is done. It is important that each teacher leave a complete record of the work of each class for the information of her successor if the plan of alternation of classes is to be a success. This

necessitates the use of a plan book or similar device that will make it possible to leave a record not only of the regular textbook material covered, but also of supplementary material that has been introduced.

"Some alternation of classes may be introduced even in the first and second grades, as, for example, in nature study. Considerable alternation can be practiced in the third and fourth, fifth and sixth, seventh and eighth grades. The recitation and study program that follows contains detailed information regarding alternation of classes.

"By correlation is meant the teaching of one subject—for example, spelling in connection with English. The major part of the correlation work will be more or less incidental and not a part of the regular program."

Technique of Program Making

The factors that influence program making in one-teacher schools are innumerable, and the problem of working out a program that can be readily adapted to the varying conditions that exist in a great number of schools is difficult, if not impossible. Sample programs can be criticized because in many cases they are adopted in certain schools where typical conditions do not exist, and the teacher tries to regulate conditions to fit the program instead of fitting or adjusting the program to the conditions. There are, however, common elements in all one-teacher schools. In the preceding section of this discussion, the matter of grade and time organization was considered. The following outline¹ is an attempt to list in orderly fashion all the factors that must be considered in making a daily schedule for one-teacher schools.

Prescribed Subjects:

1. State law prescriptions—twelve subjects.
2. Optional maximum of three subjects.
 - a. Prescribed by county course of study.
 - b. Left to teacher's choice.

Plan of Organization:

1. Eight grades.
 - a. Combination of subjects, *i.e.*, history and civics.
 - b. Alternation of subjects by days or terms.
 - c. Correlation of subjects, *i.e.*, history, geography, with language periods in first three grades.
 - d. General subjects for all, writing, art, physical education.

¹ This outline was prepared with special reference to the state of California. It is hoped that it will be suggestive to those interested in any state.



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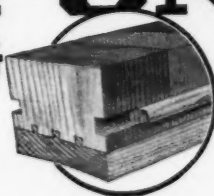
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2. Grade alternation and combination plan.
 - a. Group A—Grade 1.
 - b. Group B—Grade 2.
 - c. Group C—Grades 3 and 4.
 - d. Group D—Grades 5 and 6.
 - e. Group E—Grades 7 and 8.

Group Subject Placement:

1. Subjects for all.
 - a. Opening exercises—including morals and manners, health talks and singing.
 - b. Writing, drawing and music (so arranged that the three take a thirty-minute period each day. May be necessary to divide music into two sections.)
 - c. Physical education (supervised play) divided into two sections.
2. Group subjects.
 - a. Group A, Grade 1—reading (spelling), phonics in latter half as need arises; number work.
 - b. Group B, Grade 2—Reading; phonics and spelling; arithmetic or number work.
 - c. Groups AB, Grades 1 and 2—Language work, including history and geography stories; educative seat work, paper cutting, modeling, construction work.
 - d. Group C, Grades 3 and 4—reading; arithmetic; language, including history stories, etc.; spelling (only three groups based on spelling ability); geography, nature study.
 - e. Group D, Grades 5 and 6—reading; arithmetic; language; history; spelling, grouped on basis of spelling ability; geography, hygiene.
 - f. Group E, Grades 7 and 8—reading; arithmetic; language; history, civics; spelling, grouped on basis of spelling ability; agriculture, geography.

Enrollment and Average Daily Attendance:

1. Number of pupils.
2. Grades represented.

Individual Differences:

1. Classification of pupils based upon tests.
2. Classification of pupils based upon age.
3. Classification of pupils based upon previous training.

Length of School Day:

1. Legal school day.
 - a. Intermission, recess, physical education.
 - b. Special periods.
 - c. Available time for grade subjects.
 - d. Length of instruction periods.

2. Optional time of dismissal, *i.e.*, short session Friday, because of preparation for a school play.

Allotment of Time:

1. Time allotment per subject.
 - a. Amount of time for reading in first grade *versus* time in eighth grade, etc.
 - b. Present practices in California and other states.
2. Percentage of time allotted to first and second grades; third and fourth grades; fifth and sixth grades; seventh and eighth grades.

The accompanying schedule illustrates the results of a consideration of the factors presented.

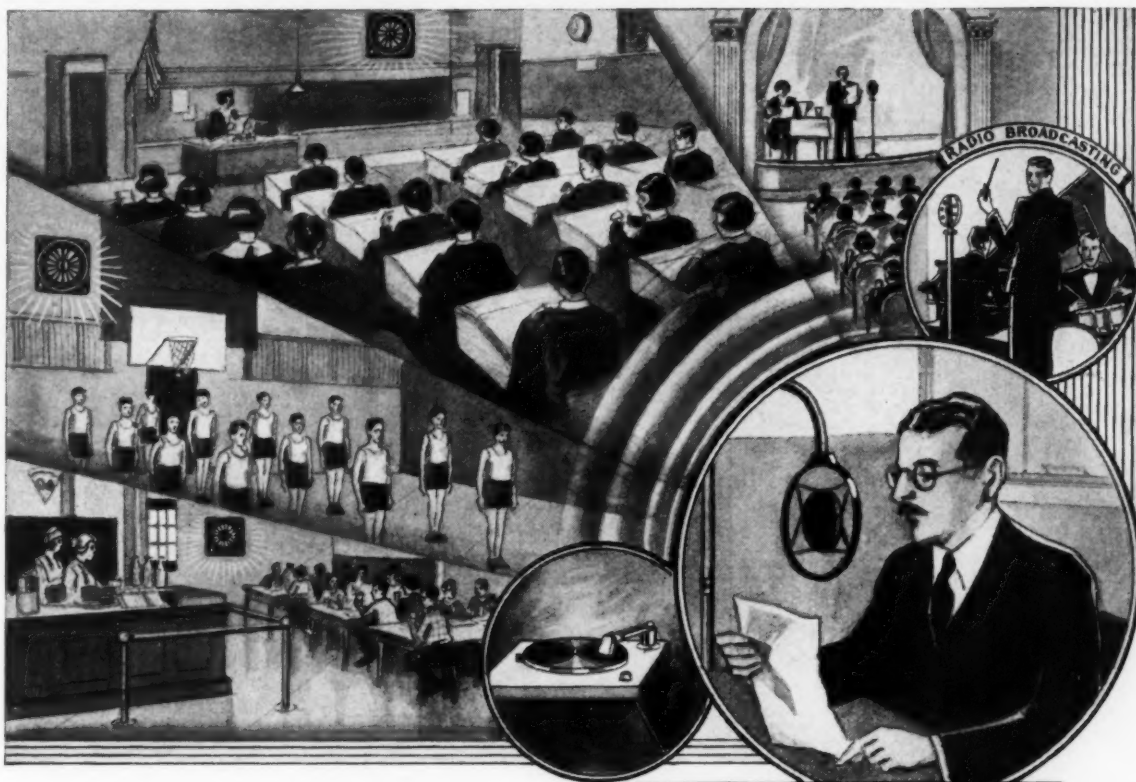
How a Boy Earned His Way Through College in 1653

High school pupils who want to go to college but who are handicapped by a lack of money should be inspired by the example of Zachariah Bridgen, who entered Harvard in 1653 at the age of fourteen, worked his way through school and was graduated four years later. Bridgen, according to records in the Office of Education, was the first student in the United States to attempt to earn his way through college.

The steward's books reveal that charges against him for college bills included "commones and sizings" (board together with food and drink ordered from the buttery), "tuition," "study-rente and beed" (room and bed), "fyer and candell" (fire and candles), "wood, etc.," and a charge for "bringing corn from Charlestown." Credit was given him for "silver," "sugar," "wheatt," "Malte," "Indian" (corn), "hoooge" and "a bush of parsnapes."

At one time, there was "given him by ringinge the bell and waytinge," one pound, two shillings, sixpence—the first record of an American student's earning a portion of his expenses in college by ringing the college bell, and by waiting on table in the commons. As a waiter, he received twelve shillings sixpence a quarter for three successive quarters, after which he was paid "on quarter for a schollership eighteen shillings, ninepence" and credited by his wages "fifty shillings and a schollership three pounds, fifteen shillings."

The total cost of a college education in 1653 ranged from thirty pounds, two shillings, one and a fourth pence to sixty-one pounds, eleven shillings, eight and three-quarters pence, or from \$100 to \$200, the amount to be paid in silver and groceries.



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It saves the multiplication of music equipment . . . **one** radio set . . . **one** phonograph . . . **one** piano . . . serves the entire school, or any part of the school, when equipped with PAM Amplifiers.

It economizes in **Space** . . . It is not essential to call together the whole school population for speeches, talks, or other programs where visualization of the speaker is not essential.

It enables simultaneous announcements and instructions, resulting in speedier action.

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News of the Month

Value of Research Stressed at Business Officials' Meeting

WITH an official registration of 253 members, the National Association of Public School Business Officials met in New Orleans for its nineteenth annual session, May 20, 21, 22 and 23. Problems relating to accounting, heating, ventilating, sanitation, purchasing, equipment and building were considered and were of interest alike to the officials from the large city system and to those from the small cities and suburban school districts.

The closing day of the session brought the election of the officers for 1930-31 as follows: president, Charles Lee Barr, assistant supply commissioner, St. Louis; first vice-president, W. N. Decker, secretary, board of education, Altoona, Pa.; second vice-president, Joseph Miller, Jr., secretary, board of education, New York City; third vice-president, W. E. Record, business manager, board of education, Los Angeles; secretary, John S. Mount, inspector of accounts, State Department of Public Instruction, Trenton, N. J.; treasurer, Henry W. Huston, auditor, State Department of Public Instruction, Trenton, N. J.

The day preceding the opening of the convention is usually devoted to a get-together for the members where they may greet each other and talk over the affairs of the year without any thought of having to attend sessions. In the evening the annual dinner is held. There was no deviation from this procedure this year, and the formal meetings of the convention were opened Tuesday morning, May 20, with an invocation by the Rev. Donald H. Watley, rector, Grace Episcopal Church, New Orleans.

The address of welcome by Nicholas Bauer, superintendent of the New Orleans schools, who formerly attended the meetings of the association as business manager from New Orleans, was delivered in his inimitably gracious style. His welcome to the delegates in the name of new-old New Orleans was augmented by the hearty welcomes of Henry C. Schaumburg, president, and Edmund J. Garland, member, Orleans Parish School Board.

Association's Functions Discussed

The president of the association, C. E. C. Dyson, architect, board of education, Toronto, Canada, then delivered the presidential address. Mr. Dyson stressed the value of research, as it is pursued by the great industries, and said that he considered research the most important function of the association.

"This research work must be developed," he said, "and this convention should consider ways and means of expanding and increasing the usefulness of such work."

The greater part of the morning session was taken up with the appointment of committees and with the presentation of reports, although two splendid papers were given—one by Ralph E. Day, member of the school board, Toronto, Canada, who read a paper drafted by his fellow

board member, Zeph Hilton, on "What the Layman Needs to Know About the Business Management of Public Schools," and one by President Dyson who read an informative paper on "Vacuum Cleaning" prepared by Dr. Harry S. Ganders, University of Cincinnati.

The Tuesday afternoon session opened with an extemporaneous address by A. J. Tete, assistant superintendent and secretary, Orleans Parish School Board, on "The Teachers' Retirement Fund." William C. Bruce, Milwaukee, handled his subject, "The Future of School Finance," in a highly creditable manner. Mr. Bruce traced the need for better school financing and discussed the present sources of school revenue.

Architects Consider Space Utilization

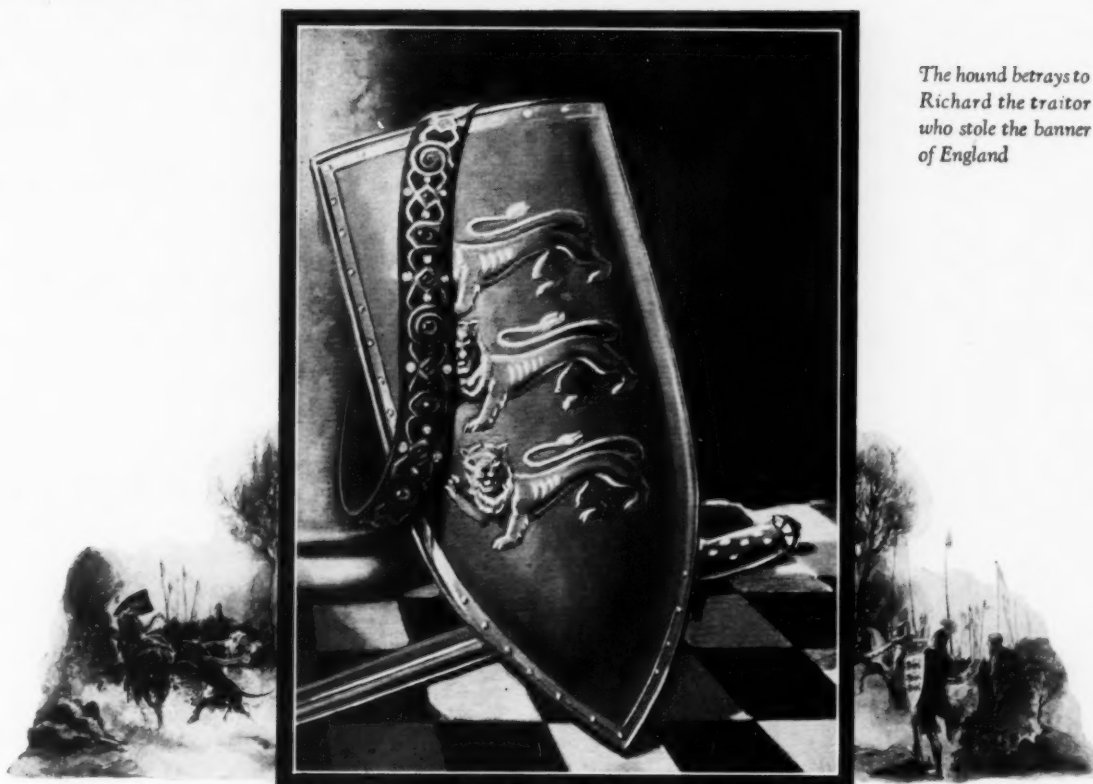
Harry D. Payne, architect, Houston, Texas, presented a forceful address on "The Lure and Interest of the Small Schoolhouse." This was a well planned treatise on space utilization. The question of the multiple use of rooms and the multiple grouping of scholastics was especially interesting to those confronted with the problem of providing ample schoolroom facilities with limited funds. A paper, "Peculiarities of School Building in the South," was read by Roscoe P. DeWitt, architect, Dallas, Texas.

The Wednesday morning session opened with delightful music by the Orleans Parish Elementary School orchestra, made up of pupils from twenty different schools in the city. Following the concert, E. E. Oberholtzer, superintendent of schools, Houston, Texas, spoke on "The Superintendent and Business Manager of a School System in Cooperative Service." In the absence of N. H. Bilgrough, chief accountant, board of education, Toronto, his paper on "Canadian Study in Educational Finance" was read by the Hon. F. B. Edmunds, member of the Toronto board.

Edward Merchant, who has served the Philadelphia board of education continuously for thirty-nine years and who is its secretary and business manager, spoke on "The Necessity for a Detailed System of Accounting in Every School District." Following Mr. Merchant's address, H. C. Roberts, Sioux City, Iowa, presented the complete report of the special committee on fire and other insurance for public school property.

On Wednesday afternoon all delegates, visitors and exhibitors were taken on an automobile tour of the French Quarter of the city, through the parks, to the site of the Battle of New Orleans and to other points of interest.

The Thursday morning session was devoted to the presentation of reports. One paper was read, that by John B. Wynkoop, business manager, board of education, Bridgeport, Conn., on "Financing New School Construction." J. S. Mullan, purchasing agent and secretary, board of education, Rochester, N. Y., gave the report of his special committee on selection, purchase, storage and



Shield of Richard. Painted by Ludwig Gassner

The hound betrays to
Richard the traitor
who stole the banner
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STORAGE SHELVING

News of the Month

distribution of public school supplies. The report on the training of public school janitor-engineers was presented by R. W. Adkisson, clerk of the school board, Okmulgee, Okla. R. L. Daly, auditor, board of education, St. Louis, followed with a summary of the report on public school cost accounting.

The members spent the afternoon of Thursday on a three-hour harbor trip on the steamer, *New Orleans*. A banquet was held Thursday evening and the convention formally closed Friday morning with routine reports of the committee on resolutions and other minor committees.

First Complete Air Map of the United States Is Published

The first complete air map of the United States has just come off the press. The map, in fourteen colors, presents a variety of detail important to the flier.

Schools in many parts of the United States are teaching the rudiments of aeronautics and to these institutions this new map will prove unusually valuable. As topography is shown in detail it should serve admirably as a wall map for the study of physical geography. Every altitude up to 11,000 feet is shown in the conventional colors. The map is forty-three by sixty-three inches in size and mounted on ebonized rollers.

The 1,500 or more flying fields that have been registered with the Department of Commerce are indicated. Every established mail, passenger and express route is shown and easily identified. The hydrographic survey of

the government has studied routes over water and these, too, are shown.

The large air transport companies as well as the Guggenheim Foundation have given their approval of the map and regard it as a valuable contribution to the science of aeronautics.

Research Institute to Expand Its Facilities

The Mellon Institute of Industrial Research, Pittsburgh, is to increase its facilities for serving American industries by a building project that will enable the material expansion of all its research activities. Detailed plans are now being prepared and construction will begin as soon as the drawings are completed, early this Fall.

The new laboratory structure will be of that type of classical Greek architecture known as Ionic. It is to be seven stories high, with monolithic columns along all four sides. The proportions will be approximately 300 feet by 400 feet.

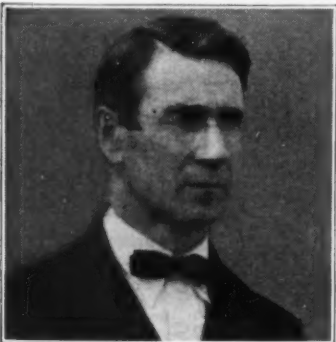
Fellows in each specific field of industrial research are to be grouped in suites of rooms so that they may best make use of general apparatus adapted to their needs. Certain rooms will be equipped for specialized phases of experimental technique, such as electrochemistry, spectroscopy, low temperature studies, radiations and high pressure experimentation. Other special features to be included are a large lecture hall, a dining hall, an industrial fellowship museum and an underground garage.





He Chases Grim Shadows From Thirsty Lips with This New Fountain

In this fountain, the Clow Soldier of Sanitation has created an artificial, refreshing spring that is as safe and fool-proof as human ingenuity can make it. Every drinker is carefully guarded from possible contamination of lips that drank before.



The Clow Soldier of Sanitation is working for you in the Clow Plant as well as in the field. New designs, refinements, careful testing are his contributions. In the picture you see Karl Wernle, Sanitary Engineer of the plumbing division, Chicago.

The owner is protected against the mischievousness and irresponsibility which every public plumbing feature must meet.

The angle stream has its source beneath a protecting hood under which lips cannot get. That source is well above the top level of the waste bowl. Should the waste become clogged, willfully or accidentally, the waste water can never reach the drinking stream spout, to carry contamination to a drinker's lips.

The stream cannot be squirted by mischievous children. Place a finger over the

opening, and the water merely runs down into the bowl and into the waste, because of exclusive Clow double opening design.

Thus the Clow Soldier of Sanitation gives you a new drinking fountain, which more than meets every health specification or recommendation.

What he has done here is typical of his work to defeat high costs and the grim ghosts of insanitation.

The fountain pictured is available in either pedestal or wall-hung types.

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News of the Month

Program of Columbus Convention Receives Final Touches

The sixty-eighth annual convention of the National Education Association will be held in Columbus, Ohio, Saturday, June 28 to Friday, July 4, 1930. The geographical location of the convention city offers the possibility of a record attendance.

The president, E. Ruth Pyrtle, principal, Bancroft School, Lincoln, Neb., is making plans for the most successful summer meeting the association has ever held. High spots in the Columbus meeting include a pageant to be presented by college students in Ohio and will be built around the history of the Northwest Territory and Ohio. A special feature of the extra-session activities will be the second life membership dinner, which more than 500 life members are expected to attend. The association will observe the Fourth of July with a flag drill by 10,000 children of the Columbus schools. Special music, vocal and instrumental, will be provided by the public schools of Columbus and other Ohio cities. Columbus entertainment plans include a sight-seeing drive through the city, and a reception by Gov. Myers Y. Cooper.

The theme of the convention is "Vital Values in Education." Emphasis will be placed upon the international point of view, the art of living, and creative living.

Classroom Teachers to Discuss Plans

The largest sectional meeting will be that of the Department of Classroom Teachers. The discussions of the classroom teachers are a vital part of these great annual meetings. It is the classroom teachers who every day come closest to the 30,000,000 young people in the American schools. The inspiration of this large group radiates to every schoolroom in the nation. Upon teachers, more than upon any group, rests the chief burden of the education process, the obligation to secure results in service. They make plans, and carry them out. Theirs is the vision and the attainment. The National League of Teachers Associations will review the principles of the single salary schedule as they function in Denver, Cincinnati and Minneapolis.

Teachers from all units of the school organization will be represented. The Department of Kindergarten-Primary Education will consider the special problems of schoolroom planning, will emphasize creative expression for young children, and evaluate new activities in European schools.

The program of the Department of Lip Reading will center around the technique of prevention of deafness and the methods of teaching the hard of hearing child and adolescent. Speakers of the Department of Visual Education will report results of research and review the progress of visual instruction in the United States from 1923 to 1929.

The Department of Elementary School Principals will emphasize the administrative phases of the principal's work. A special Conference of Superintendents of Schools will consider other phases of administration and supervision. The Department of Supervisors and Directors of Instruction will consider problems connected with the mastery of the tools, techniques and spirit of learning.

The National Council of Education will observe its

fiftieth anniversary in a discussion of the social objectives in education. Its principal sessions will be held Saturday, June 28 and Monday, June 30. A dinner will be held Saturday evening.

The Department of School Health and Physical Education will devote time to such topics as safety, health, and physical education and athletics.

What girls of high school age can be taught about training their young brothers and sisters, as well as the technical phases of home economics, will be emphasized in the National Conference of Supervisors and Teachers of Home Economics.

The National Congress of Parents and Teachers will contribute to the worthy home membership objective in considering the problems of parent education.

The National Geographic Society will provide an entertaining and instructive lecture showing how the "ring calendars" of an ancient tree have helped toward a better understanding of history in determining the dates of scores of important Indian ruins in the southwestern part of our country.

The Department of Social Studies points toward the achievement of higher ideals of citizenship through teaching of history, and the study of racial problems and social adjustments.

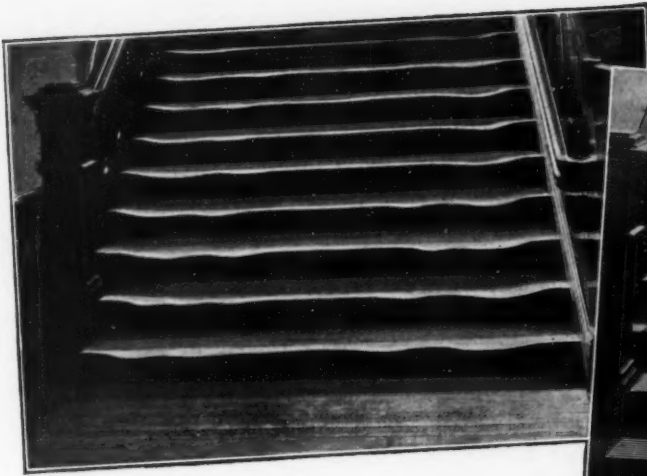
The relations of business and business education is an important problem for the Department of Business Education in their discussions of the objective of vocational effectiveness.

The Department of Adult Education will plan a research program and discuss coordination of adult education with community organizations in the effort to enrich adult life through the schools. The Departments of Deans of Women, Rural Education, Science Instruction, and Vocational Education will all have constructive, helpful discussions of their problems. Department and allied programs will begin Monday, June 30 and will close Thursday, July 3. All department and allied meetings will be held during the afternoons. Some of them have scheduled luncheons and dinners.

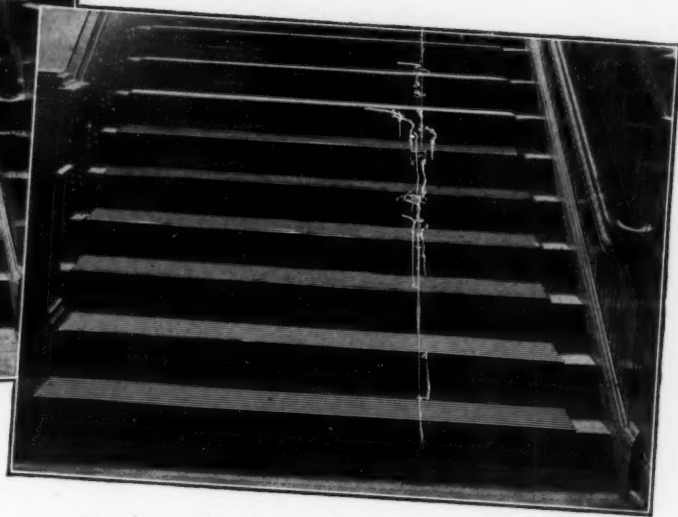
Personality Charts to Help School Administrators Select Teachers

A new system of rating students has been adopted at Indiana State Teachers College, Terre Haute. The new plan consists in checking each student by means of a personality chart. Heretofore, grade records were the only available files that superintendents seeking teachers might go to for information. Under the new system, those desiring teachers will be able to get an idea of the general personality of the student he is hiring as well as of the student's mental abilities.

The personality charts are filled out by each instructor for each of his students at the end of every term. The report includes the professor's estimate of each student's personal appearance, enthusiasm, trustworthiness, good judgment, resourcefulness, speech and social adaptability. Under each of these items, a student may be checked in a high quarter, that is, the high 25 per cent of the student group; in a middle half, which includes 50 per cent; or in the low quarter.



Note dangerous condition of steps before Wooster Safe-Groove Treads were applied.



Safe, attractive stairs with new treads applied over worn steps.

Wooster Safe-Groove Treads Made these School Stairs BETTER than NEW

The installation of Wooster Safe-Groove Treads on a badly worn stairway in the Janesville Vocational School, Janesville, Wis., made the stairs better than new, according to G. J. Ehart, Director. The wooden treads were so worn down by traffic as to be dangerous.

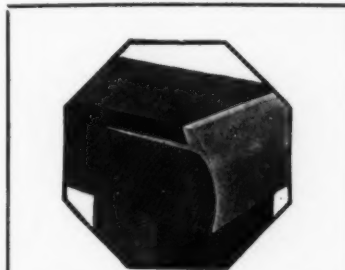
The installation of Wooster Safe-Groove Treads with ribs of abrasive grits was cheaper than to have rebuilt the stairs with new wood treads, according to Mr. Ehart.

"At the present time they

are equal to new stairs and in some ways superior, for these treads will not wear out like wood treads," Mr. Ehart writes.

Wooster Safe-Groove Treads give safety and long wear to new or old stairs of any material. They may be had in either steel or highly polished yellow brass, with abrasive grits or lead anti-slip, to harmonize with any architectural effect.

Write for samples and complete information on Wooster Treads for either new or worn stairs.



Wooster Security Nosing
To protect the edges of linoleum, rubber, cork, tile, etc., from wear when installed on stairs. Made for material $\frac{1}{8}$ " to $\frac{1}{4}$ " in thickness.

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SAFE—GROOVE STAIR TREAD

News of the Month

Date Is Named for Next Department of Superintendence Meeting

The sixty-first annual convention of the Department of Superintendence of the National Education Association will be held in Detroit, February 22-26, 1931, according to President Norman R. Crozier, superintendent of schools in Dallas, Texas.

Doctor Crozier has selected for his program theme, "Working Together for the Children of America." Invitations have already been extended to many speakers, and the principal features of the programs will be announced soon.

The convention will open with the usual Sunday afternoon vesper services which will emphasize the theme of the meeting in a series of tableaux depicting the school, the home, the church and the community working together for the spiritual welfare of the children. The visual presentation will be accompanied by choruses of children from the Detroit schools.

The general sessions and exhibits of the convention will be held in the Detroit Masonic Temple which is ample in size, comfortably furnished and conveniently located.

Penn Wynne, Pa., to Be Site of New \$400,000 Elementary School

A new elementary school is to be built at a cost of \$400,000 in Penn Wynne, Pa., and will serve the communities of Penn Wynne and Overbrook Hills-in-Merion. It will stand on five acres of ground and will have a commanding position.

The exterior walls will be of brick with limestone trim. The main floor will contain classrooms, an office, toilet rooms, a woodworking room, a paint and glue room and storage rooms. The second floor will contain classrooms, a rest room, a projection room, a cafeteria and a kitchen, a teachers' dining room and a large storage room. A janitor's room, a storage battery room and a boiler room will comprise the basement facilities.

Ohio School Girl Wins Gorgas Memorial Essay Contest

President Hoover on May 12 awarded the Charles R. Walgreen prize of \$500 for the winning essay in the second annual Gorgas Memorial essay contest to Pauline Lodge, of Lakewood, Ohio, a senior in the Lakewood High School.

The ceremony was held in the south grounds of the White House in the presence of a group including the national judges.

The subject of this year's contest was "The Gorgas Memorial; Its Relation to Personal Health and the Periodic Health Examination," and, according to the Gorgas Memorial Institute of Washington, D. C., over 5,000 essays were submitted by high school pupils from all parts of the United States.

A state prize was awarded for the best essay in each

state, and from these papers the national winners were selected by a committee of judges composed of Dr. Hugh S. Cumming, Surgeon General, United States Public Health Service; Dr. William Gerry Morgan, president-elect, American Medical Association; Dr. William John Cooper, United States Commissioner of Education and Dr. Allen B. Kanavel, regent, American College of Surgeons.

Miss Lodge received, in addition to five \$100 bills, presented by President Hoover, \$250 for travel expenses to Washington for the presentation.

More Effective Federal Aid Is Sought in Public Schools

A policy of more efficient cooperation by the federal government with the states in meeting the problems of general education without interfering with or jeopardizing the traditional decentralized or state and local control over their educational systems was urged by superintendents of education at a conference with members of the National Advisory Committee on Education recently.

This conference was one of a series being held by the advisory committee in connection with its survey of the relations between the federal government and the states in handling education.

The chairman of the national committee, Dr. C. R. Mann, presided, and the director of the committee, Dr. Henry Suzzallo, led the discussion.

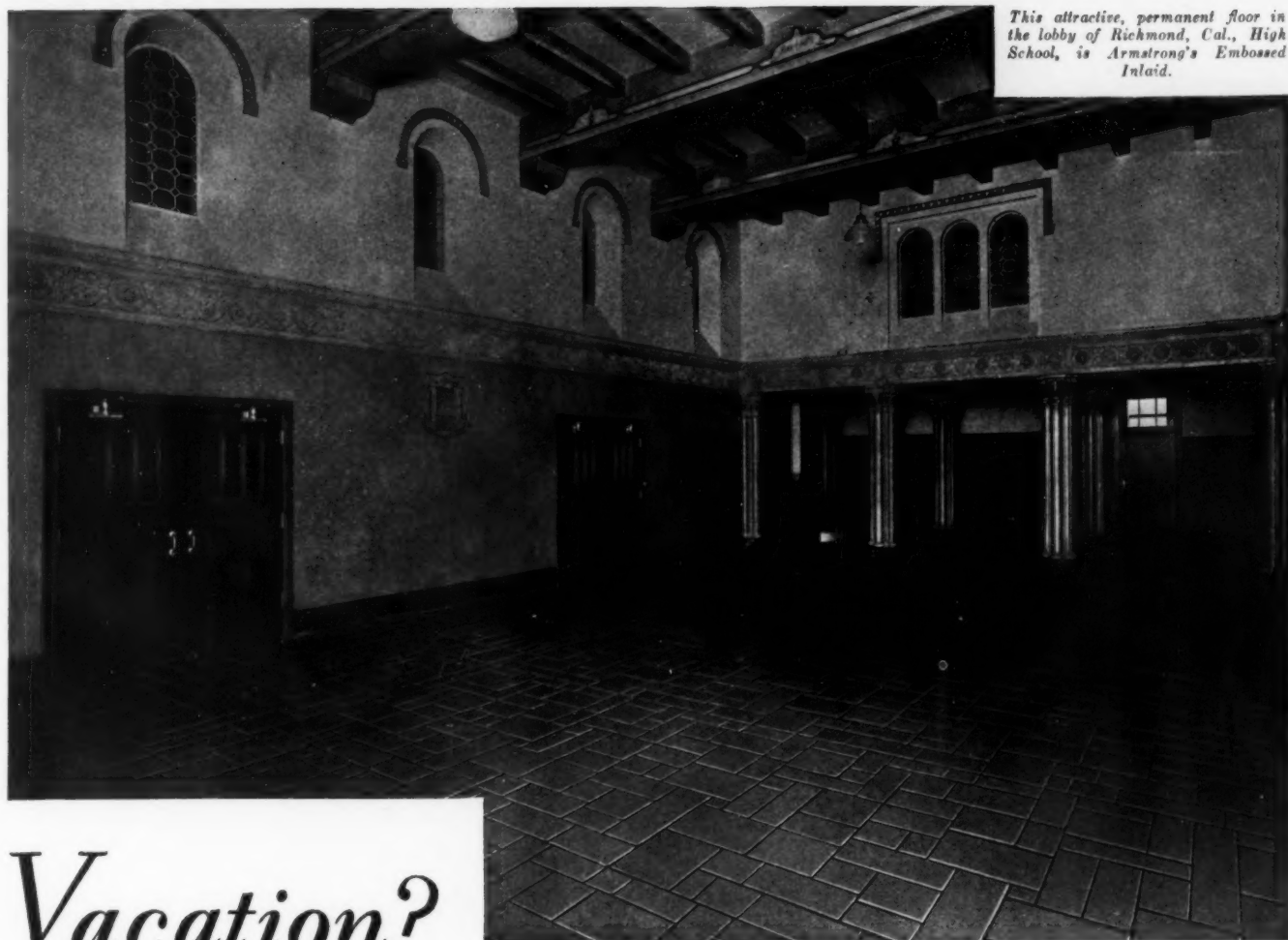
Doctor Suzzallo summarized the general views expressed when he said it was plain that there was a recognition for a more efficient coordination of the federal educational agencies to get rid of duplication, a desire for a more effective method of educational research by the federal government to aid the states, and a return by the federal government to its early practice of aiding education generally rather than by fostering special types of education, and finally a general agreement that there are problems of education so national in character that federal cooperation is necessary for the general welfare of the citizens. However, he added, it seemed equally clear that those present did not wish to depart from the traditional local autonomy in education by favoring a centralized system at Washington.

How the cooperation of the federal government is to be worked out in a manner consistent with the traditions and wishes of the states, Doctor Suzzallo said, involved a form yet to be considered after its functions have become clearly defined.

Increase Asked in Funds for Indian Schools

A supplemental appropriation of \$665,000 for support and education of Indian pupils in Indian schools of all classes for the next fiscal year is asked in estimates just submitted to the House by the President and budget bureau.

Congress, by passage of the first deficiency act on March 26, appropriated \$1,100,000 for support of these schools and the budget bureau says there is need for the increase, particularly for subsistence of Indian pupils.



This attractive, permanent floor in the lobby of Richmond, Cal., High School, is Armstrong's Embossed Inlaid.

Vacation? not for this lobby floor!

HUNDREDS of feet hurry over this modern linoleum floor every school day in the year. Feet bringing in dust and dirt, mud and moisture; feet grinding, scraping from morning bell to the final rush that proclaims "school's out!" But this modern floor needs no rest, asks no favors. You see, Armstrong's Linoleum was installed in this lobby.

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It's such a quiet floor underfoot, too. Students can study more easily and pleasantly in the hushed silence of a room floored with Armstrong's Linoleum. And the warmth and resilience of this attractive floor rests young feet in classrooms, corridors, and laboratories.

Colors? Yes, indeed, scores! And patterns suited to any classroom—from the

Armstrong's Linoleum in Richmond, Cal., High School lobby bears the brunt . . . of every day's traffic

kindergarten up. To aid you in your selection, we would like to send you our color-illustrated book, "Public Floors of Enduring Beauty." Just

ask for it. You'll also find our School Service Department glad to help you. Armstrong Cork Company, Floor Division, Lancaster, Pennsylvania.

Other Schoolmen Say:

"We have had our (Armstrong's Linoleum) Floors down for ten years and they are wearing well," says Principal J. D. Ripple, Joseph Johns Junior High School, Johnstown, Pa., "We find them quiet and comfortable."

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News of the Month

Summer Course in Aeronautics Offered for Teachers

To meet the demand for instruction in aeronautical subjects for public school, high school and college instructors, the Boeing School of Aeronautics will hold a summer session July 7 to August 8 at the Oakland, Calif., airport. The Boeing School, one of the largest in the country, has been approved by the Department of Commerce. Summer session work will be credited toward a complete course at the Boeing School. Students may complete the entire requirements over a longer period of time than the six weeks summer session if this is desired to avoid interfering with regular work.

Among the subjects offered at the summer session are: airplanes laboratory, airplane engines laboratory, engines shop, radio communications laboratory, welding laboratory, welding shop, engineering drawing, fabrications laboratory, airplane drafting, air law, materials of construction, instruments, aviation, meteorology, airplanes, airplane engines, aviation radio and principles of welding.

Elementary School for Negroes Planned at Morristown

With the decision of the Morristown Normal and Industrial College, Morristown, Tenn., for Negro students, to eliminate its elementary grade courses, the city is now making plans to build a grade school for these pupils. High school pupils will probably continue to attend the high school department of the college as heretofore. A school building suitable for both the grade and high school subjects will be erected, but if a satisfactory contract can be made only the elementary grades will use the building for the present.

Character Education Is Theme of Recent Conference

At the time of the dedication of the new school of education building, New York University, the elementary education department sponsored a character education discussion conference.

Some sixty of America's outstanding educators interested in the problems of character education and elementary education met for a period of three hours to consider the present status and major problems of character education. The unusual interest in character education as well as the recognition of the personnel participating in the discussion is evidenced by the fact that approximately 500 persons were kept away in order that those present might have undistracted expression of thought.

The program was centered around five major problems, each under the general direction of a discussion leader. The major units of discussion and the respective leaders of discussion were as follows: "Elements of Character," Dr. Henry Neumann, leader, Brooklyn Society for Ethical Culture; "Problems of Method in Character Education," Prof. Edwin D. Starbuck, University of Iowa; "Curriculum Aspects of Character Education," Prof. W. W.

Charters, Ohio State University; "Scientific and Testing Approach to Character Education Problems," Prof. Hugh Hartshorne, Yale University; "Teacher Training and Character Education," Prof. Goodwin B. Watson, Teachers College, Columbia University.

As a basis for the discussion over fifty controversial issues in the field of character education were compiled and used as points of departure by those participating.

New Vocational School for St. Louis to Provide Roof Playgrounds

Work has been started in St. Louis on the Herbert S. Hadley Vocational School which is to cost \$1,592,590. The building is named for former Governor Hadley of Missouri who, at the time of his death, was chancellor of Washington University, St. Louis.

The new school is to be a part of a \$3,500,000 vocational school outlay in St. Louis. The section to be built is designed for shops, laboratories and classrooms. It will contain an auditorium seating 4,000 pupils, an academic high school and other quarters. Approximately 43,000 square feet of playground will be provided on the roof, which is to be made safe by high parapet walls on which there will be an iron fence.

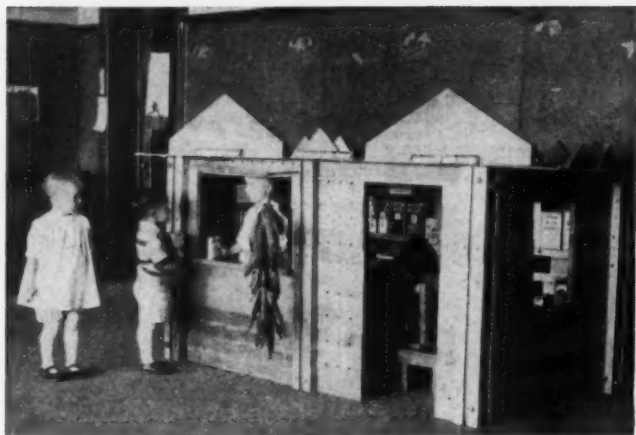
High Schools Supplement Courses in Civics by Trips to Washington

Illustrating a noticeable tendency on the part of high schools and finishing academies throughout the eastern portion of the country to supplement the regular curricula in history and civil government by conducting their graduating classes on a tour of the nation's capital, 275 members of the Upper Darby High School, Philadelphia, recently spent three inspiring days viewing at first hand the historical scenes in Washington, D. C.

Other high school groups visiting Washington the same week—May 5-10—included the North Plainfield, N. J., High School, the Philadelphia High School for Girls and the Brooklyn Preparatory School, 175 strong. On the following Monday, May 12, came also the New Castle, Pa., High School group, and on May 15, 220 members of the West Philadelphia High School for Girls, all of whom remained in the city until the afternoon of May 17.

Nevada Teachers Are Given Bonus for Summer Session Work

The board of education of McGill, Nev., has again authorized a bonus of 10 per cent of the annual salary (payable in ten monthly installments) to each teacher who attends a satisfactory six-weeks' summer session at a standard college or university, or who spends a minimum of six weeks in travel outside the continental limits of the United States. By resolution of the board, this bonus applies to principals as well as to teachers.



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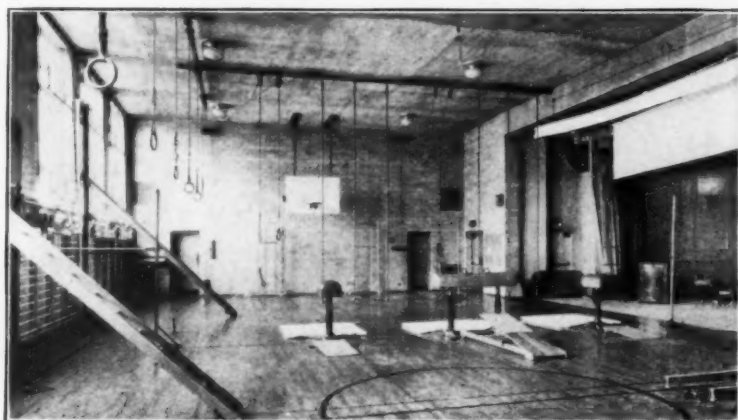


Used in practically every state in the Union, American Portable Schools provide regulation size classrooms with proper lighting and all comfort. They are easy to heat and well ventilated.

New double wall construction consists of siding, insulating paper, sheathing on outside of studding and Insulite (5 times the insulating value of plaster) on inside. Austral windows. Double exits. Double floors.

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Where technical advice, the experience of trained men, the knowledge gained through years of service, is required in planning a gymnasium, and its equipment—those in charge invariably turn to MEDART, whose engineering department gives without charge or obligation, the benefit of 57 years actual working experience in specialized manufacturing.

When gymnasium equipment is desired to serve better, to last longer, to give, through superior features, exceptional results—invariably the installation is MEDART.

MEDART Gymnasium Equipment, through exceptional service of more than half a century is a standard of physical directors. MEDART equipment is the answer to your needs.



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Makers of Gymnasium Equipment,
Playground Apparatus, Steel Lockers,
Steel Shelving, Steel Cabinets,
and Junior Line for the Home Play-ground.

FRED MEDART MANUFACTURING COMPANY
POTOMAC AND DEKALB STREETS
SAINT LOUIS, MISSOURI

In the Educational Field

BRIG-GEN. CHARLES E. HYATT, president and commandant, Pennsylvania Military College, Chester, Pa., died recently.

PAUL CLIFFORD STETSON, superintendent of schools, Dayton, Ohio, for the last nine years, has been named superintendent at Indianapolis, Ind. He succeeds DANIEL T. WIER who has been acting superintendent since January 2 and who took the position with the understanding that he was to hold it temporarily.

GILBERT STEWART WILLEY, superintendent of schools, Trinidad, Colo., has been appointed professor of education at the University of Denver.

H. R. BULL, district superintendent, Healdsburg Grammar School, Healdsburg, Calif., died recently. MR. BULL, who was sixty-five years old, had taught and counseled in the schools of Healdsburg for forty years. CHARLES W. WIGGINS, rural supervisor of Sonoma County, succeeds him.

CHARLES LINDSAY has been elected dean, Norfolk Junior College, Norfolk, Neb. BARRET A. GREER, present dean of the college, is planning to work toward a doctor's degree during the coming year.

T. B. BLACKSTONE, superintendent of schools, Elkhart, Texas, and ARTHUR COLVIN, principal of the high school, have resigned. MR. COLVIN goes to Alief, Texas, and MR. BLACKSTONE plans to do advanced educational work.

JOSEPH HARVEY YOUNG, superintendent of schools, Hamler, Ohio, died recently.

FLOYD E. ANDERSON, principal, Belmont High School, Belmont, N. Y., for the last six years, has been chosen principal of the high school of Attica, N. Y.

FREDERICK W. CRUMB, JR., has been named principal of the new East Nassau School, Nassau, N. Y.

C. F. RIDGLEY, superintendent of schools, Logan, Ohio, died recently as the result of a heart attack.

J. H. GRAVES has resigned as superintendent of the Monterey Union High School, Monterey, Calif.

OSCAR M. CORBELL, principal, Centralia Township High School, Centralia, Ill., has been reelected for a two-year term.

L. R. SWITZER, principal, Dunsmuir High School, Dunsmuir, Calif., and W. L. KLEAVER, district superintendent of the grammar schools of that city, have resigned. Their successors have not yet been named.

GEORGE A. KIPP, superintendent of schools, Phillipsburg, N. J., has resigned to become supervising principal of schools, Tenafly, N. J.

ERNEST CONWAY has been named principal of the Sumner School, Syracuse, N. Y.

ERNEST W. BUTTERFIELD, New Hampshire commissioner of education, has accepted a like position in Connecticut. He succeeds DR. ALBERT E. MEREDITH who goes to New York University. DOCTOR BUTTERFIELD was superintendent of schools, Dover, N. H., for fifteen years.

ROBERT M. SAMPSON, assistant superintendent of schools, Susquehanna County, Pa., died recently. He had been assistant to SUPT. F. H. TAYLOR for eight years.

HERBERT H. HOWES, superintendent of schools, Medford, Mass., has resigned to become principal of the State Normal School, Hyannis, Mass. He succeeds FRANCIS A. BAGNALL, who is to be transferred to the State Normal School, Framingham, Mass.

KNOX WALKER, superintendent of schools, Dublin, Ga., has been named supervisor of the Fulton County Schools.

WALTER A. GEESEY, superintendent of schools, Sunbury, Pa., for twelve years, died suddenly April 7.

WARD IRA MILLER, superintendent of schools, Delta, Colo., has been named head of the schools of Fort Collins, Colo., succeeding A. H. DUNN, who retires after thirty-seven years of service—eighteen as superintendent. MR. DUNN will continue to have a connection with the schools in an emeritus position.

JOHN H. PARKER, superintendent of schools, Kingston, Pembroke, Halifax and Plympton, Mass., died recently.

DR. HARRY S. WILLARD has resigned as president of the board of education, Ridgewood, Pa., because of ill health. DOCTOR WILLARD has served on the board for nineteen years.

H. D. DOUGLASS, superintendent of schools, Fowlerville, Mich., has resigned.

LOUELLA ABNEY has been elected superintendent of schools of Madison County, Ky. She succeeds LELIA HARRIS who has held the position for the last four years.

CHARLES C. RICHARDSON, superintendent of the schools of Clarksburg, Florida, Savoy and Monroe, Mass., is leaving his present position to teach in the University School, Bridgeport, Conn., which is owned by his son, MARK M. RICHARDSON.

CALISTA ROY has been appointed assistant superintendent of schools, Newton, Mass. She succeeds MABEL C. BRAGG who has resigned to accept a position at Boston University.

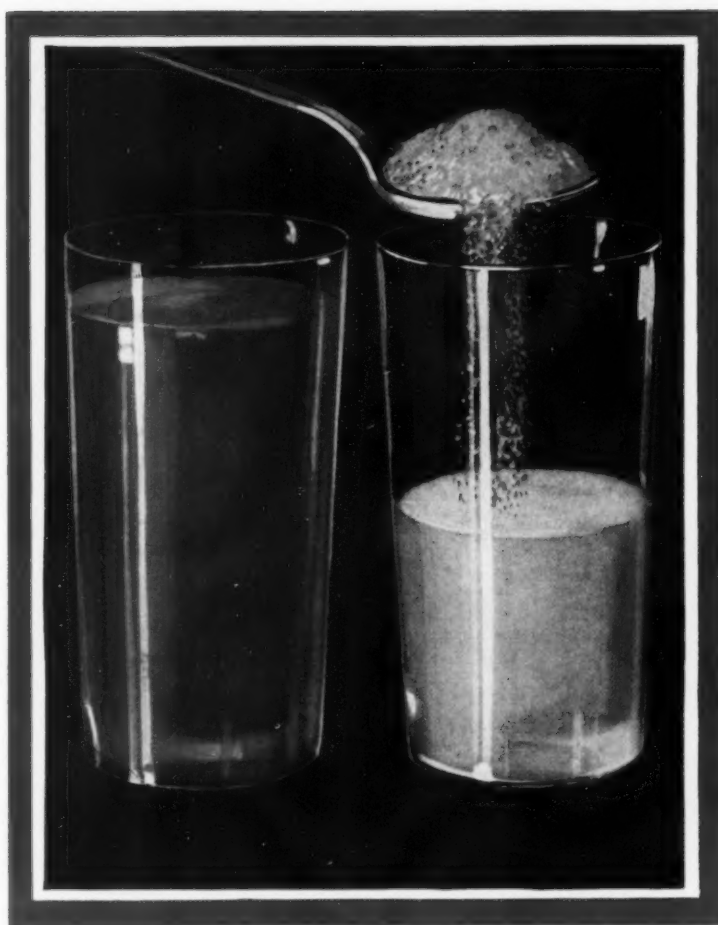
DR. F. M. NICOLSON has resigned as dean of Wesleyan University, Middletown, Conn.

OMER CARMICHAEL, supervising principal, Tampa Public Schools, Tampa, Fla., has resigned in order to continue his educational studies at Columbia University where he is working toward his doctorate.

GEORGE B. MILLER, superintendent of schools, Aberdeen, Wash., since 1914, died recently. He had been ill for a long time.

W. L. THOMPSON, Jackson, Miss., is the new superintendent of the Itawamba County Agricultural High School. He succeeds G. W. SHEFFIELD, who has served as superintendent for the last seven years.

R. W. KIRK, city school superintendent, Oregon City, Ore., died recently. He had been ill for several months.



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THREE simple colors—yet they are saving hundreds of dollars every hour to thousands of operators throughout the country!

The illustration above shows you *why* Soilax, the patented cleaning material, will cut your present cleaning material costs 25 to 50 per cent. Soilax, in its original state, is a pink powder. Used correctly, it forms a green solution. But when too much is used, the solution turns yellow.

What a check against waste! The correct use of Soilax can be demonstrated to your employees in a few minutes. After that, you will find your cleaning costs taking a decided slump downward. You won't use two cups of Soilax where one will do—the color signals will see to that!—and you will find that you are requiring far less cleaning material than you have before.

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Make us prove these claims. All we ask is that you put Soilax on trial and *compel* us to prove this cost cutting to you.

Let us send you a month's supply of Soilax for you to test in every kind of cleaning—in your dishwashing machine, for cleaning walls, floors, painted surfaces, bathrooms, kitchen utensils, any place you desire. At the end of the month, determine the cost of the Soilax used with that of the material you were using before you read this advertisement. If the difference in cost is not 25 to 50 per cent less for the Soilax, you may have the month's supply of Soilax with our compliments.

Remember, in addition to cutting costs, we also guarantee better cleaning than you have ever had—the high standard of cleanliness Soilax is maintaining for such discriminating institutions as the Hotels Statler, Inc.; Geo. Stoughton's Eat Shops, St. Paul-Minneapolis; Myron Green's Cafeterias, Kansas City; Universities of Minnesota, Iowa, Indiana and Ohio, and hundreds of hospitals.

The coupon below is a convenient way to make us prove these claims. Send it now, "Beware of substitutes and infringements."

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Economics Laboratory, Inc., 2694 University Avenue, Saint Paul, Minnesota
Please send us Soilax as checked with this understanding:

1. If we are not convinced at the end of 30 days' trial that Soilax is rendering us a superior cleaning result at a saving of 25 to 50 per cent in our present cleaning material bill, or if we in any way feel that Soilax is not all you claim for it,

☐ 125-lb. drum — 13c a lb.

☐ 325-lb. bbl. — 12c a lb.

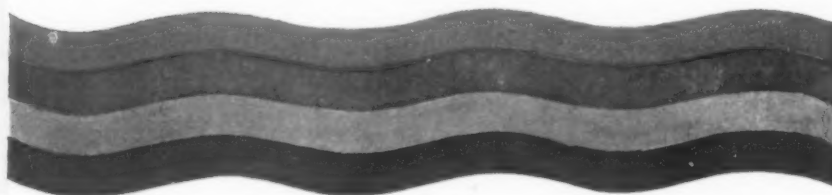
the demonstration is not to cost us a cent. In these points, we are to be the sole judge. 2. If we are convinced that your claims are justified, we will remit to you the cost of the Soilax according to the prices below.

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THIS NEW PLAN SAVES YOU NEARLY HALF YOUR BLANKET · COST ·

*H*otels and hotel systems throughout the country are accepting this new, economical idea. Learn how you, too, can save expense by exchanging old woolen blankets for new ones.



THIS remarkable idea helps hotel managers turn a dead loss into genuine saving. Through the Blanket Exchange Plan, every wornout, shabby wool blanket has a "turn-in" value towards a brand-new ALL PURE WOOL BLANKET.

You wouldn't think of throwing a car on the scrap heap simply because it showed its age. You make it help toward the cost of a new car. That is the idea behind the Blanket Exchange Plan, originated by the Old North State Mills, the oldest American manufacturers of quality all-wool blankets.

Don't throw your old blankets into the rag bag. Don't cut them up for polishing cloths. Just ship them to us and get an even one-for-one exchange

on the following basis:

You turn in:

You get in exchange:

One old blanket and \$3.55

One NEW blanket 60" x 84"

One old blanket and \$3.80

One NEW blanket 70" x 84"

Colors: Solid white, rose, blue, green, tan.

We suggest you try this special money-saving Blanket Exchange Plan today. Simply have your secretary send us the coupon, and we will at once forward six beautiful new blankets in the size and color you select. When you get the blankets and test them for quality and appearance you will be glad you took advantage of this saving. Every blanket guaranteed.

OLD NORTH STATE MILLS

(Blanket Exchange Dept. 00)

SOUTH BERWICK, MAINE

MAIL THIS TRIAL ORDER BLANK TODAY

OLD NORTH STATE MILLS (Blanket Exchange Dept. 00)
Established 1854
SOUTH BERWICK, MAINE

Gentlemen: We are shipping you today by express (.....) shabby, woolen blankets. Please exchange these for (.....) NEW pure-wool blankets in the size and color checked below, and ship to us at once. It is understood that you guarantee every blanket to be fast color and all wool or money will be refunded. Send bill for the following and we will pay upon receipt.

(Check size)

☐ 60" x 84" \$3.55 each

☐ 70" x 84" \$3.80 each

(Check color)

☐ Orchid

☐ Rose

☐ Blue

☐ Green

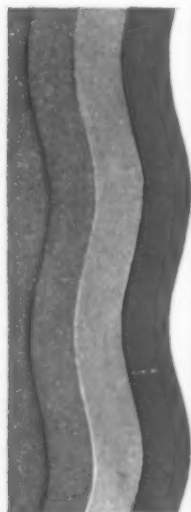
☐ Tan

☐ Gold

Hotel

Town..... State.....

Approved by



No Better Opportunity

is afforded the school superintendent to test the economy of washing painted walls, ceilings, and decorations with



than during vacation period.

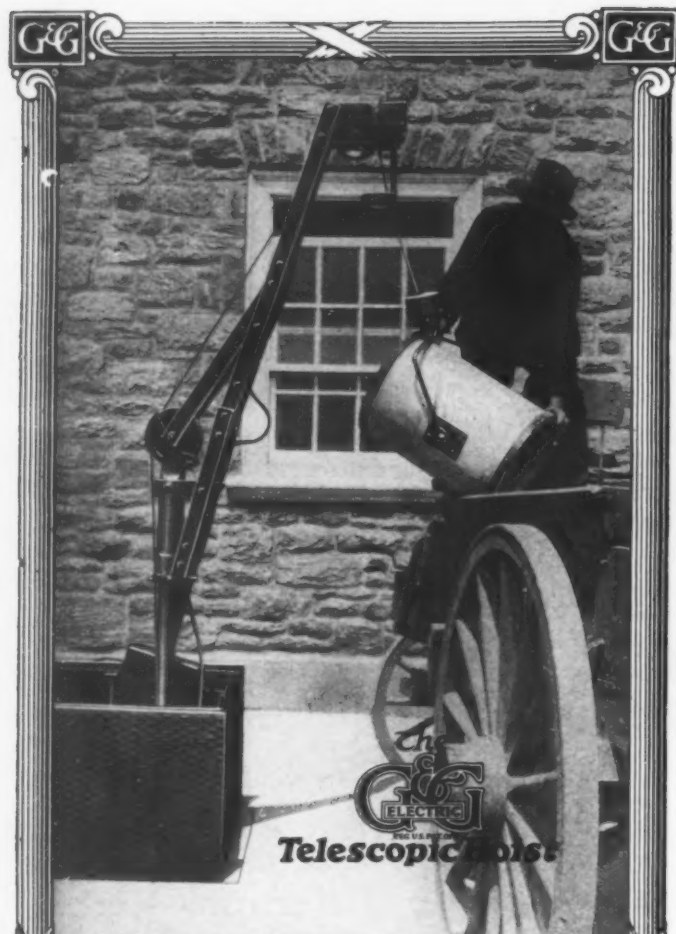
A single test on one room will demonstrate how completely the paint can be given the appearance of a new paint job.

Paint is designed to give a much longer life than it is usually allowed, and a washing with Wyandotte Detergent will prove that repainting is necessary only over long periods.

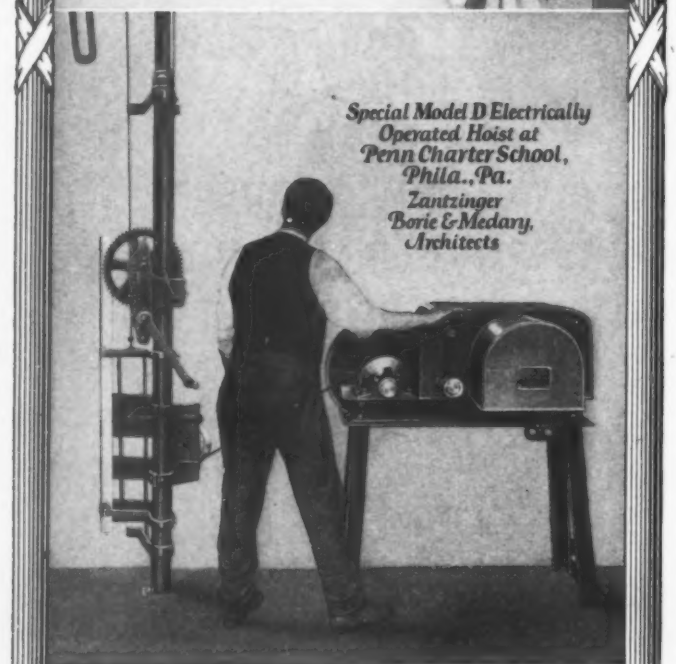


Ask your supply man for
"WYANDOTTE"

The J. B. Ford Co., Sole Mfrs., Wyandotte, Michigan



Telescopic Hoist



*Special Model D Electrically
Operated Hoist at
Penn Charter School,
Phila., Pa.
Zantzing
Borie & Medary,
Architects*

201 Schools in Pennsylvania Use G&G Ash Removal Equipment

THE three big reasons are Safety, Economy in Operation, and Long Life. Now standard equipment with Boards of Education in many large cities. Electric and hand-operated models to meet all conditions. Write for catalog and details.

GILLIS & GEOGHEGAN
523 West Broadway New York, N. Y.

Modern means for Modern methods!



Filmo School Projector in use in San Diego Public School, showing one of the many industrial subjects available in 16 mm. film.

Filmo School Projector!

Fire drills without fire escapes would be as much in line as school room movies without modern projection equipment. The Filmo 57 School Projector is not only abreast of the latest ideas in visual education, but is a stride or two in advance. For day in and day out, Bell & Howell engineers scrutinize its every part in order to bring to the school room the latest idea in projector design.

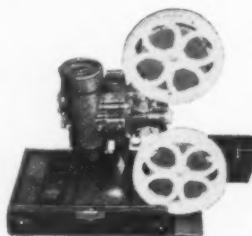
Side-tension, for instance, in Filmo's shuttle mechanism, means a minimum of strain on the film and a tremendous gain in control and in efficiency of the film move-

ment. And Filmo's direct lighting, powered by a 250-watt mazda, means a striking increase in screen illumination. In every phase of Filmo's design, science and practicability merge to provide a machine immediately adaptable to every problem in visual education.

Filmo Projector can give you the same satisfaction which thousands of other schools are now enjoying in its use. A nearby Filmo dealer will arrange for demonstration, or write today for booklet "Filmo in Schools and Colleges." See Filmo Booth C-2 at Columbus meeting, N. E. A., June 28-July 3.

All Filmos use 50 or 100 foot films

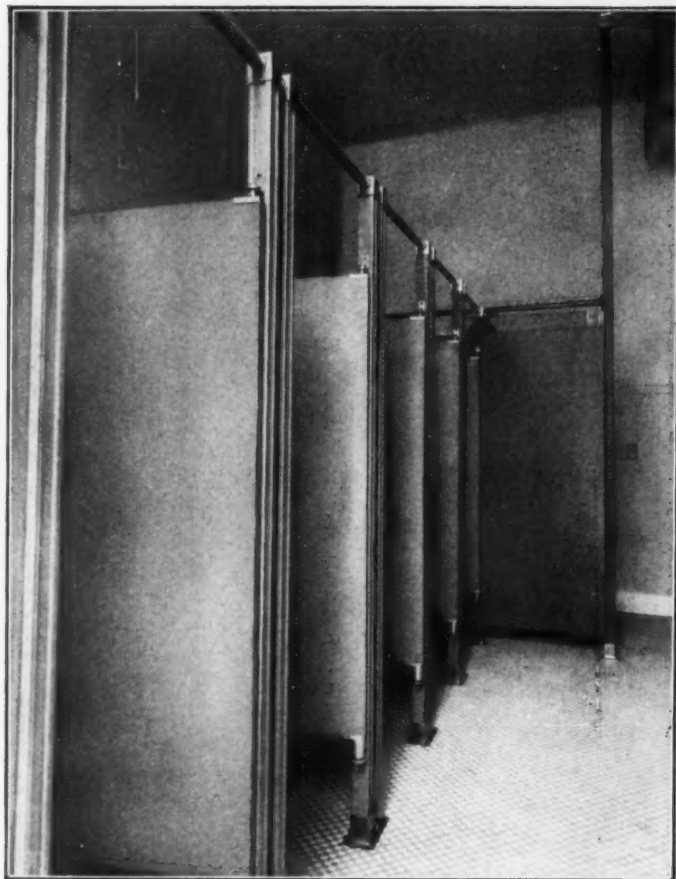
For black and white pictures, Filmo cameras use Eastman Safety Film (16 mm.) in the yellow box—both regular and panchromatic—obtainable at practically all dealers' handling cameras and supplies. Filmo cameras and Filmo projectors are adaptable, under license from Eastman Kodak Company, for use of Kodacolor film for home movies in full color. Cost of film covers developing and return postpaid, within the country where processed, ready to show anywhere with Filmo projector.



Filmo 57-E-Special School Projector, 250 watt, 5 amp. lamp, fixed resistance, 45-50 condenser, geared rewind, large type sprockets and safety shutter. With special new style school base case, \$205. Other models from \$198 up.

BELL & HOWELL Filmo

BELL & HOWELL CO., DEPT. R, 1815 LARCHMONT AVENUE, CHICAGO
New York • Hollywood • London (B. & H. Co., Ltd.) • Established 1907



In Lincoln School, Nutley, N. Y.



Health and Cleanliness Come First!

E DUCATION in personal hygiene takes foremost rank in many modern schools.

A part of this early training begins in the toilet room. In the "dark ages" of American school history, little good was accomplished in *that* schoolroom, much harm got under way. Subtle suggestion ran riot, lack of supervision, lack of sanitation caused untold damage to the impressionable juvenile mind.

That phase of education is largely history now. In these more enlightened times, well lighted, sanitary, wholesome toilet accommodations are provided as a matter of course. Anything else would be unthinkable.

Sanymetal Steel Toilet Compartments are credited with an unsurpassed contribution to this new picture. They have advanced child hygiene in the nation's schools. They will do the same for *your* school.

Sanymetal Products for Schools Are: Toilet, shower, dressing and urinal compartments. Corridor and smoke screens. Metal doors and wainscot. Sanymetal Gravity Hinges. Write for New Catalog No. 30.

THE SANYMETAL PRODUCTS CO.
1722 Urbana Road, Cleveland, O.

Sanymetal
STEEL
OFFICE & TOILET
PARTITIONS

New Standards of Sanitation



Like an answer to the cry of school and health authorities everywhere. A new standard of drinking sanitation! Century engineers have conquered fluctuating water pressure. They have eliminated sudden splashing gushes. They have forever banished the inconvenient, unsanitary trickle. The new Century bubblerhead assures at all times a constant healthful drinking stream. This is true sanitation.

The outstanding performance of these new modern fountains has attracted the attention of health authorities, and everywhere municipal health departments are approving them for use in schools, institutions and public places. Precision engineering and all-brass construction assures a life time of care-free service and makes them preferred above all others, especially where drinks are numbered in the thousands daily. We invite school authorities to investigate fully these new modern fountains. The new Century automatic bubblerhead is available on all Century fountains and is adaptable to any fountain already installed. The new Century catalog contains the full story. Write for it today.



CENTURY BRASS WORKS, INC.

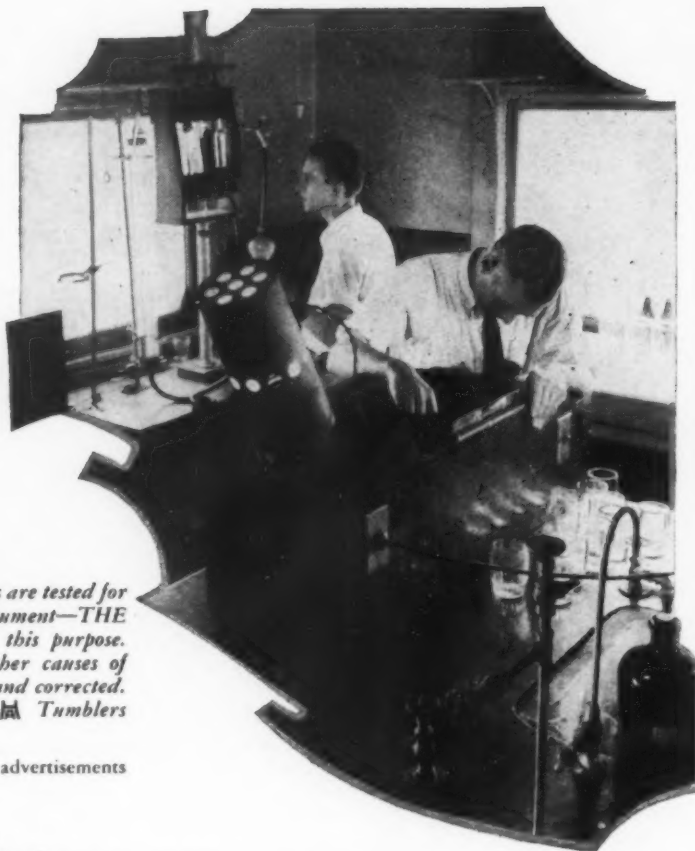
902 Illinois Street


Belleville, Illinois





Century SANITARY
DRINKING Fountains


ALL SIZES AND STYLES OF TUMBLERS



Tumblers from every run of glass are tested for "strain." A scientific instrument—THE POLARISCOPE—is used for this purpose. Any errors in annealing or other causes of "strain" are instantly detected and corrected. This is another reason why  Tumblers stand up longest.

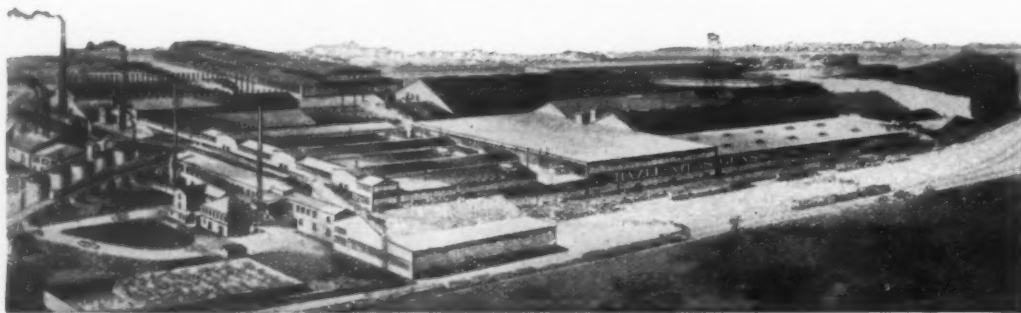
No. 6 of a series of advertisements

A  TUMBLERS are strongly constructed and clear in color. Glazed edges and smooth bottoms are other features. Our immense production and 100% automatic equipment enable you to purchase  TUMBLERS at no increase in price over other tumblers.

*Your Glassware Supply House will
serve you with samples and prices of
 TESTED TUMBLERS*

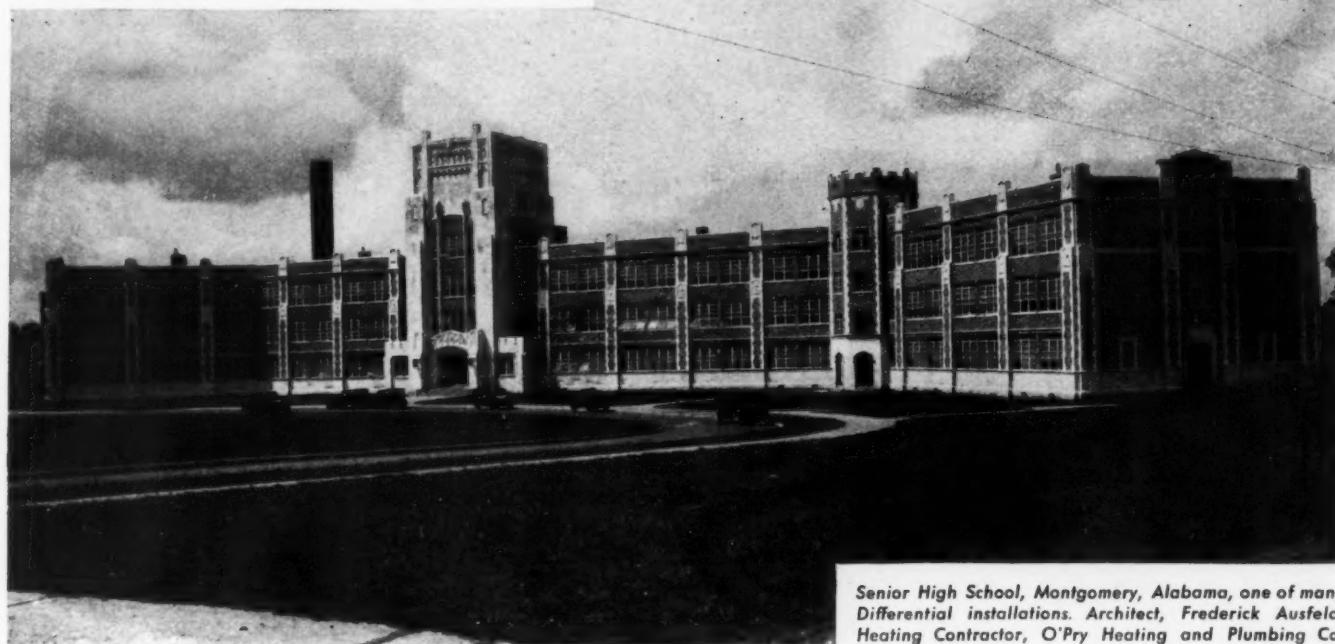
THEY ARE GUARANTEED TO OUTLAST THEM ALL

HAZEL-ATLAS GLASS CO.
WHEELING, W. VA.



WORLD'S · LARGEST · TUMBLER · MANUFACTURERS

NOW is the time



Senior High School, Montgomery, Alabama, one of many Differential installations. Architect, Frederick Ausfeld. Heating Contractor, O'Pry Heating and Plumbing Co.

to cut next year's fuel bills

COUNT up the cost of heating service for the past season. What would a 25% saving in fuel cost mean to you? Then consider these facts:

Dunham Differential Heating Systems are installed in over 700 buildings of all types, including hospitals, schools and others, from the largest office buildings to modest residences. These systems deliver uniform, comfortable heating in any weather, with service so perfectly regulated that occupants are seldom conscious of the heating system at all.

They save from 25 to 40% of the fuel which would be required with ordinary types of heating systems.

In new buildings Differential systems consistently operate at 25% less fuel cost than indicated by authoritative estimates based on normal operation of even the best of other types of heating systems. In buildings where the Differential system has replaced other heating equipment, direct comparisons "before and after" show fuel savings running from 25 to 40%.

If this improved heating service and reduced operating cost would be desirable, investigate the Dunham Differential Heating System. Your present heating system can be changed over to Differential operation at a moderate cost.

Dunham engineers will survey your present system without obligation. Arrangements may be made for funding the cost of change-over to Differential Heating. The fuel savings meet the payments required.

C. A. DUNHAM CO.

Dunham Building

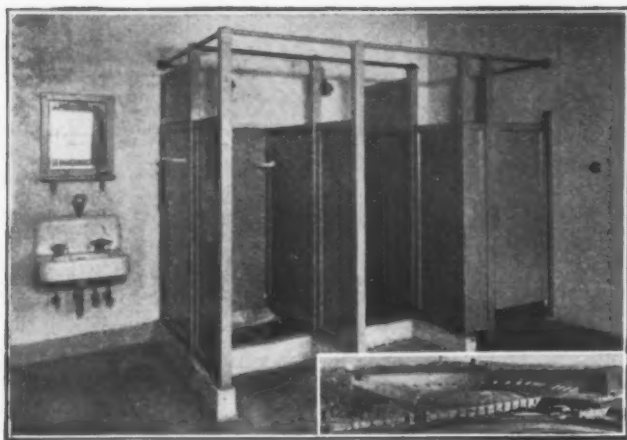
450 East Ohio Street Chicago, Illinois

Look for the name DUNHAM. This name plate identifies a genuine Dunham Thermostatic Radiator Trap.

Over 80 branch Offices in the United States and Canada bring Dunham Service as close to you as your telephone. Consult your local directory



Dunham Engineers are at your service with complete and authoritative data on improved heating to meet your individual requirements



EBCO SHOWER ROOM Installation
University of Minnesota Stadium

Arch.: Prof. Mann, Minneapolis, Minn.
Engineers: Osborn Eng. Co., Cleveland, Ohio

"EBCO"
STEEL
COMPARTMENTS
for Toilets, Showers,
and Dressing Rooms

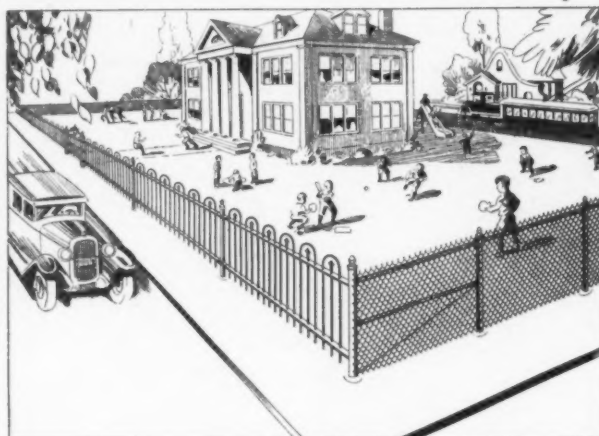
Constructed of furniture stock steel, full cold rolled and patent leveled. Being 100% steel, they are vermin proof, fire resisting and the last word in sanitation—furnished in attractive "Krinlac" finish—sage green, baked on. Also supplied in prime coat, special lacquer finish or baked enamel when so specified—Write for new catalog of sanitary school fixtures for toilet, shower and dressing rooms.

THE D. A. EBINGER SANITARY MFG. CO.
401 W. Town St. Columbus, Ohio

Manufacturers also of Ventilated Urinals, Closets, Wash
Fountains and Drinking Fountains—ice and electrical.

"THE EMBLEM" "EBCO" OF QUALITY"

Barriers of Safety



Stewart Iron and Wire Fences for school enclosures

Have you learned of Stewart's latest achievements in fence construction—the new Oval-back I-Beam fence post and their new improved patented three-ribbed channel rail?

Write us for the School Fence catalog which will greatly assist you in choosing the right fence for your purposes.

THE STEWART IRON WORKS COMPANY
INCORPORATED

616 Stewart Block

Cincinnati, Ohio

STRONGER THAN STEEL!



THE
SOLID KUMFORT
FOLDING CHAIR
REG. U. S. PAT. OFF.

Bentwood
**FOLDING
CHAIRS**
*for Every
Purpose!*

*for Hotels, Schools,
Auditoriums*

**Also PRESS-TOE LOCK
FOLDING CHAIRS**

Neat, Strong, Long Lived

Write for Bulletin



LOUIS RASTETTER & SONS CO.
1404 WALL ST., FORT WAYNE, IND.

"INTER-TWILL" Window Shades for SCHOOLS

Fulfill all requirements

Specify—"INTER-TWILL" because . . . there are more years of service in these window shades. It is a **TWILL** woven fabric of exceptional strength. "Inter-twill" shades are washable.

If total exclusion of light is desired, specify Interstate "NO-LITE" Shade Cloth. Shadowless and light-proof in all colors including light colors and white.

Made in the color tone of your choosing

Interstate Shade Cloth Co.
HOBOKEN NEW JERSEY

and

The Lapsley-Interstate Shade Cloth Co.
Baltimore Maryland

THIS ECONOMICAL DESK PROVIDES AMPLE WRITING SURFACE



Movable Chair Desk. Notice the design of the desk support which is curved out near the seat to permit complete leg freedom and proper posture.

THE generous size top of this movable chair desk with extended arm provides ample writing surface and proper forearm support. The top is purposely made of solid wood, instead of veneer, to prevent marring and chipping. When movable desks are shoved and dragged about a room, or piled in a corner to make room for sweeping and cleaning, the tops rub, bump, and scrape. Unless the tops are made of solid and selected hardwood such as is used on this H-W desk, they may chip, peel, and be otherwise marred by such treatment. This sturdy H-W unit is designed to withstand just such use and abuse. In addition, it is an economical style to buy since it is a one-unit desk, entails no expensive installation cost, permits closer spacing, and saves time in cleaning. Before deciding about school seating, get all the facts on one of the most popular selling styles built today—the Heywood-Wakefield Movable Chair Desk. Any H-W sales office will be pleased to explain and demonstrate it in detail.

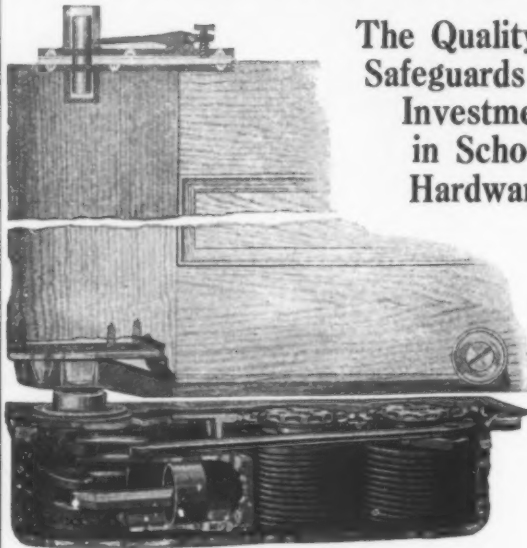
SALES OFFICES

Baltimore, Md.
Boston, Mass.
Buffalo, N. Y.
Chicago, Ill.
Dallas, Texas
Houston, Texas
Los Angeles, Calif.
New York, N. Y.
Oklahoma City, Okla.
Philadelphia, Pa.
Pittsburgh, Pa.
San Antonio, Texas
San Francisco, Calif.
Seattle, Wash.

HEYWOOD-WAKEFIELD

MAKERS OF PRACTICAL SCHOOL SEATING

STAMINA



The Quality that
Safeguards your
Investment
in School
Hardware!

Rixson No. 30 & 40 Double Acting FLOOR CHECK

See that this big husky double duty floor check gets the job of controlling heavy duty doors on your school next term. It may cost a little more, but divide that extra by the extra years of service and you'll find the cost per year lower than you can get by any other means.

The reputation of Rixson "Thirty" and Rixson "Forty" for reliability is due to a patented construction with double sets of springs and checks in each unit. One set swings and checks the inswinging motion, the other set controls the outswing, and the two sets are independently adjustable.

Ask your architect or builders' hardware dealer to show you the Rixson Catalog in "Sweets."

THE OSCAR C. RIXSON COMPANY
4450 Carroll Avenue Chicago, Ill.
New York Office: 101 Park Ave., N. Y. C.
Philadelphia Atlanta New Orleans Los Angeles Winnipeg

RIXSON

Builders' Hardware

Overhead Door Checks
Floor Checks, Single Acting
Floor Checks, Double Acting
Olive Knuckle Hinges
Friction Hinges

Casement Operators & Hinges
Concealed Transom Operators
Adjustable Ball Hinges
Butts, Pivots and Bolts
Door Stays and Holders

That Last Hour When Trouble Starts



Tired—weary and restless—that's why children get into trouble during last hour periods. It's then when teachers are under greatest strain—when children pay less attention to studies and seats are most uncomfortable.

Avoid last hour strain on the part of pupils and nervous strain on the part of teachers by equipping with National Seats of Comfort with the famous

Moeser Extended Arm Reduces "Last Hour Uneasiness"

In National Desks, equipped with the Moeser Extended Arm, pupils sit squarely in their seats. The back is supported when writing—working space is more than doubled—no turning to rest arm while writing—eliminates facing light and uncomfortable positions that bring on "last hour uneasiness." When writing the arm is supported, resulting in better penmanship. National Desks are shaped to conform hygienically to the human figure—they encourage correct posture—insure greatest comfort—less fatigue—less eye strain—better grades in last period classes and less worry and nerve strain on the instructor.



No. 101

Combination Desk with Moeser Arm Top. Standards finished in durable, baked enamel; woods in National process finish, both in a soft brown color.

This 10 Point Test Leads to National

- | | |
|----------------|----------------------|
| 1. Health | 6. Compactness |
| 2. Comfort | 7. Lasting Finish |
| 3. Convenience | 8. Harmonious Design |
| 4. Strength | 9. Simplicity |
| 5. Durability | 10. Sanitation |

Years of collaborating with America's leading educators, together with our own exhaustive research and experiments, have resulted in equipment noticeably superior from the viewpoint of these 10 Major Tests for All School Seating.

Write for New National Catalog

If you are a buyer of School Equipment you will want our latest catalog on School Desks. All types of school chairs and teachers' and office desks. We will send our catalog free and prepaid on request.

The National School Equipment Co.
Manufacturers of Complete School Equipment
PORT WASHINGTON, WIS.

NATIONAL School DESKS

"Famous for Comfort"

For PERMANENCE! General Electric Wiring System

Stately One Wall Street... gigantic, dominant, rising 50 stories straight out of the financial heart of the world! Every element in the building is intended for a generation of unfaltering service. The wiring installation—the nerve system of this great building—is therefore of paramount importance.

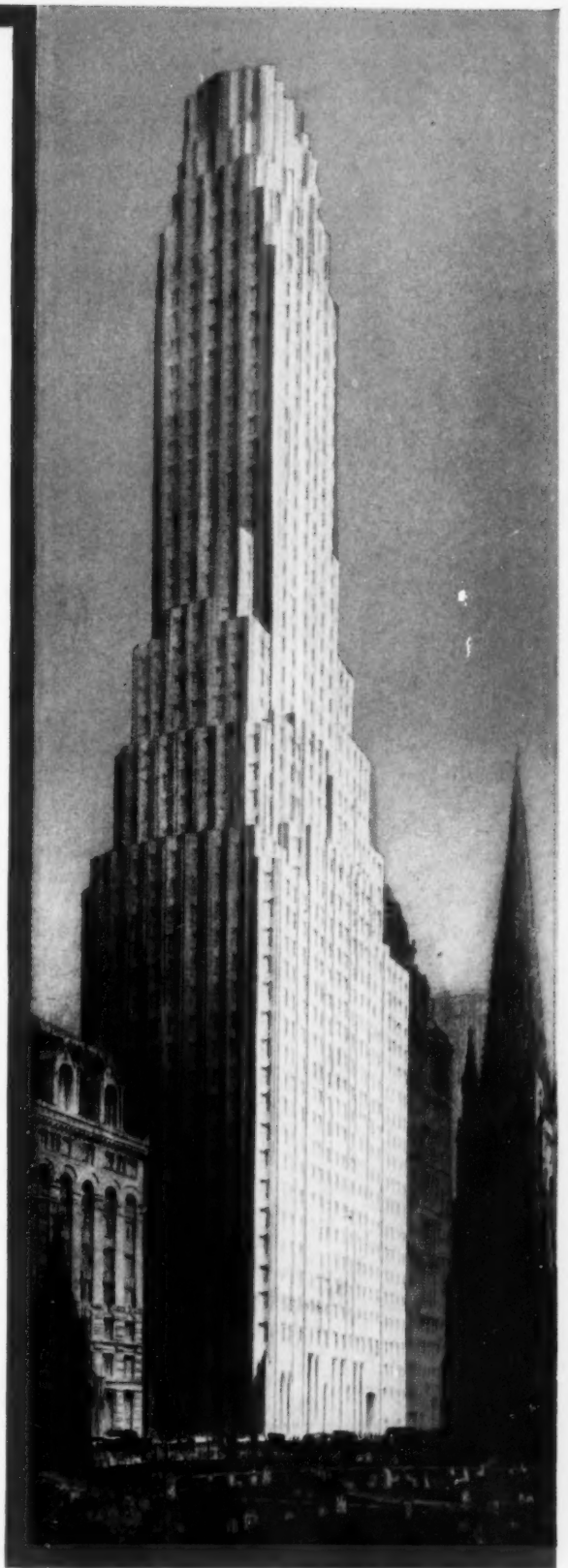
That is why the General Electric Wiring System was chosen. This massive commercial tower requires wiring that matches the best of other building materials and equipment available to architects, builders, contractors.

General Electric Wiring assures lasting satisfaction, low maintenance, utmost dependability.

It is fitting that "General Electric"... best known name in the world of electricity... should be sealed into the walls of such a structure. The General Electric Wiring System puts the same degree of permanence into any building—mightiest mastodon of commerce... tiniest cottage.

ONE WALL STREET

The Irving Trust Company's New York
Headquarters and Office Building.
Architect: Voorhees, Gmelin & Walker.
Builder: Marc Eidlitz & Son, Inc.
Electrical Contractor: J. Livingston & Co.



GENERAL ELECTRIC

WIRING SYSTEM

*CELLized Wood Floor Blocks are available in sizes from 6 $\frac{1}{4}$ " to 13" squares, and in rectangles 6" x 12" and 6 $\frac{1}{4}$ " x 13 $\frac{1}{2}$ ". Each block is a complete unit of three or more flooring strips, $\frac{13}{16}$ " thickness.



Northwest Lion's Club, Chicago; Shattuck & Layer, Architects; floor laid by Kaucher Engineering Co.

Versatility

Floors that are *different*. Design patterns, using various hardwoods, alone or in combinations



Seats screwed to the wood block floor in the North Little Rock High School, Little Rock, Ark.

*CELLized wood floor blocks are economical, meeting every practical requirement a school floor should possess, with the style and beauty inherent in a design wood floor.

In class and assembly rooms, where durability is the first consideration, maple and beech blocks, pre-sanded and then *CELLized, effect a very material saving in finishing costs. They need only be laid in EVERBOND, a sound-deadening plastic cement, directly over concrete or any level sub-floor, before use.

Cleaning, if necessary, and polishing may be accomplished in one operation by the application of hard paste-wax.

***CELLized Oak Flooring Inc.**
MEMPHIS — TENNESSEE

Sold through lumber dealers everywhere; manufactured by

THE LONG-BELL LUMBER CO. . Kansas City, Mo. ARKANSAS OAK FLOORING CO. . Pine Bluff, Ark.
E. L. BRUCE COMPANY . . . Memphis, Tenn. NASHVILLE HDW. FLOORING CO., Nashville, Tenn.

OAK

back,
showing
spline

WALNUT

LIGHT
PHILIPPINE
MAHOGANY

MAPLE

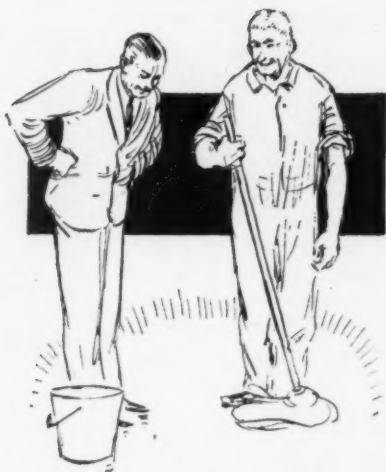
DARK
PHILIPPINE
MAHOGANY

BEECH

*CELLized wood floor blocks are guaranteed by *CELLized Oak Flooring Inc. Laid only by Licensed Flooring Contractors. The names of those licensed to use this label in your locality will be supplied upon request.



*CELLized by a chemical treat, to reduce the tendency to change in size. Insect and decay resistant.



TRAZITE removes that stubborn dirt with little effort

DO stubborn deposits, tracked in by students, mar the appearance of floors in your building? Then use TRAZITE, the remarkable Oakite material that makes quick, easy work of cleaning terrazzo, tile, and composition floors.

Wet the floors with a mild solution of TRAZITE, allow the solution to stand for a few minutes, then scrub lightly and mop up. Dirt will completely disappear; floors will look like new. And little effort . . . no really hard scrubbing is required.

School superintendents everywhere are finding that TRAZITE'S thorough, rapid cleaning action gives better results and saves time and money. Our nearby Service Man will gladly give you more details. Write and ask to have him call.

Oakite Service Men, cleaning specialists, are located in the leading industrial centers of U. S. and Canada

Manufactured only by
OAKITE PRODUCTS, INC., 28D Thames Street, NEW YORK, N. Y.

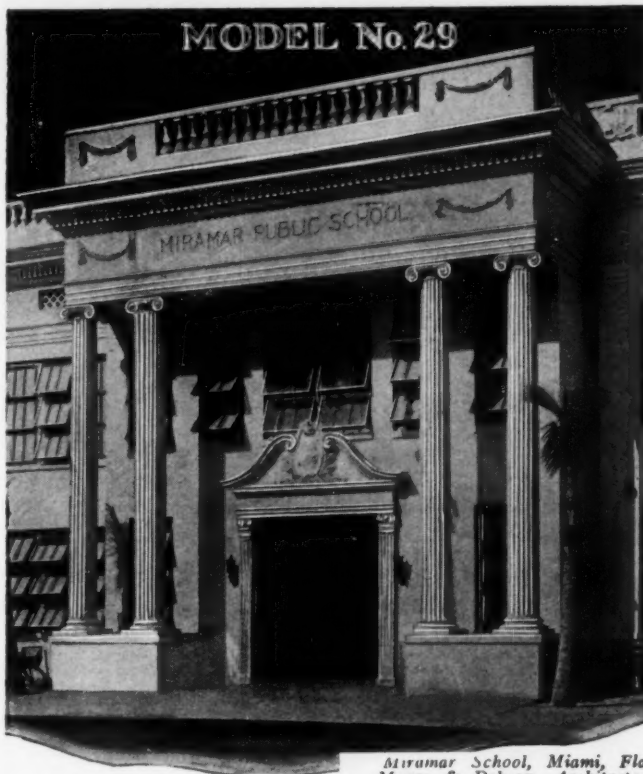
OAKITE

TRADE MARK REG. U. S. PAT. OFF.

Industrial Cleaning Materials and Methods

TRUSCON DONOVAN AWNING TYPE STEEL WINDOWS

Invented and Developed by JOHN J. DONOVAN, Architect, A. I. A.



*Miramar School, Miami, Fla.
Mayer & Dobson, Architects.*

for Health and Safety

Diffused sunlight and draughtless ventilation are provided for schools, offices and other buildings by Truscon Donovan Awning Type Steel Windows. They are operated very simply without window poles by the movement of the lower sash which controls the upper sash. The shades on the open windows act as awnings. Their high quality is evident in their superior design and workmanship. Their cost is moderate due to large production. Full information, literature and quotations on request.

Build NOW While Costs Are LOW

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO

Warehouses and Offices in Principal Cities
Truscon Steel Company of Canada, Limited, Walkerville, Ontario



Troy Marathon
Extractor 30 in. size.
Vertical motor drive.

Extra deep basket
at no extra cost.

Marathons are money savers

Economy rules when Marathon Extractors are installed in the school laundry.

Bed and table linens, athletic uniforms and other washable articles are handled quickly. Capacity loads are extracted with distinct savings in power and labor.

Write for full information on Marathon Extractors and other Troy equipment for school laundries of any size or type. No obligation.

TROY LAUNDRY MACHINERY CO., INC.

Chicago - New York City - San Francisco - Seattle - Boston - Los Angeles
JAMES ARMSTRONG & CO., Ltd., European Agents; London, Paris,
Amsterdam, Oslo. Factories: East Moline, Ill., U. S. A.

TROY

LAUNDRY MACHINERY

Since 1879—The World's Pioneer Manufacturer of Laundry Machinery



**It's a
SCHOOL LADDER**

with a
*Special Safety Platform
and Folding Shelf*
—Self-Operating—

← THE SAFETY LINE

Unlimited usefulness and greatest safety are combined in this ladder for general school use. It is made of **aeroplane spruce** braced with **cadmium plated steel** tie-rods and knee braces—a remarkable combination for strength and lightness in weight. Five sizes, 3' to 8' platform height.

The enclosed platform and the handy shelf never need to be touched. They open and close automatically with the ladder. Compact when folded.

Send for
Descriptive
Bulletin No. 117

THE PATENT SCAFFOLDING CO.
New York: 3821 Sherman St., L. I. City Chicago: 1550 Dayton St.
Boston — Atlanta — Philadelphia — St. Louis
San Francisco — Pittsburgh

Auto-Step

The SELF-OPERATING PLATFORM LADDER

DRAPER ADJUSTABLE Window Shades

FOR nearly a quarter of a century school boards have protected their window shade investments by specifying Draper Window Shades. Easy operation—long life—correct ventilation—the modifying and diffusing of light to eliminate glare—these features make Draper Window Shades specially adaptable for schoolroom use. Skilled workers and high standards of workmanship, backed by experiment and experience

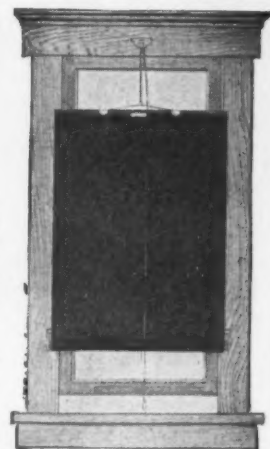
combine to produce a better shade, preferred by school buyers everywhere. Tested and proved daily in thousands of schools. For illustrated catalog describing the complete Draper line of School Shades, address Dept. N. S.

Luther O. Draper Shade Company

SPICELAND

Luther O. Draper
TRADE MARK
REGISTERED

INDIANA



Illustrated above:
Draper Sanitary Style Shade



Safe!

Falcon Liquid Toilet Soap can't spread germs like the dangerous bar soap... for it touches nobody's hands but the user's. It's economical in use too. The quality and the concentration are always uniformly high.

DEPENDABLE QUALITY

REAL soap! Thick, creamy-lathering, neutral and soothing. Made in three grades. Send for samples and convince yourself.

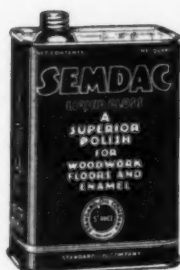
The Eagle Soap Corporation
64 E. Jackson Blvd. Chicago, Ill.



FALCON

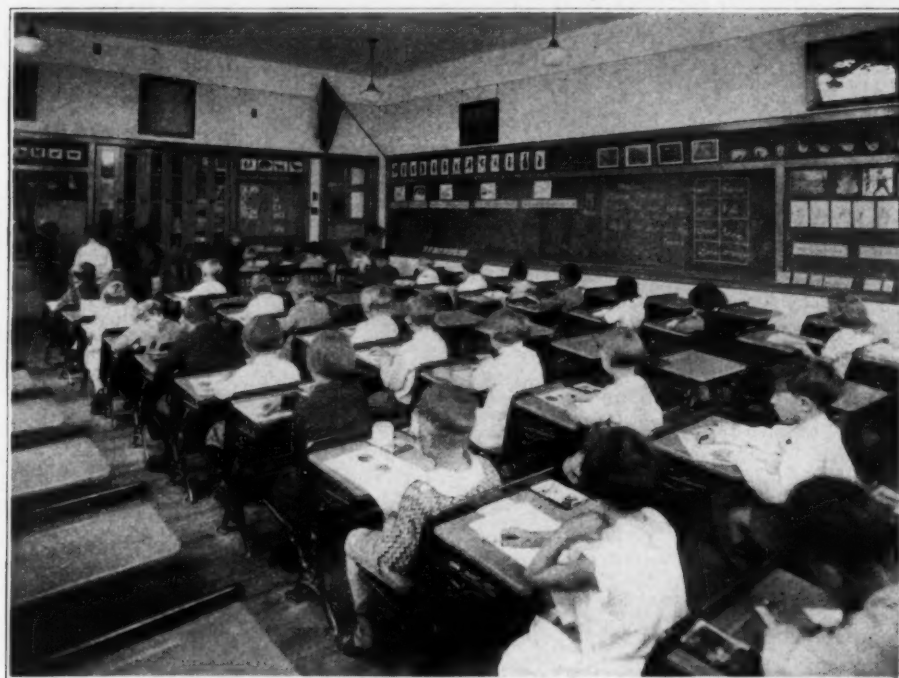
LIQUID SOAP

Painted walls and surfaces need Semdac Liquid Gloss



SEMDAC FURNITURE DRESSING

Semdac Furniture Dressing is an ideal polish for the finer furniture. It leaves a brilliant durable lustre. Merely applying it removes the dirt. Gentle rubbing with one or more clean, dry cloths brings out the rich, high lustre.



THE oils and gums which enter into the composition of paints and varnishes are affected by the air. Such surfaces are likely to crack, peel, grow dull. Semdac Liquid Gloss is the preservative and cleaner ideally suited to the school. Applied to painted and varnished areas it restores the original luster, safeguards against weathering action and protects against the marks and smudges of the careless child.

Semdac is economical in cost, and—best of all—its action, both as a clean-

ser and as a polish, requires a minimum of effort. In use it demands no excess rubbing. It spreads a gloss immediately, and it seals all cracks against further deterioration.

Schools everywhere are enthusiastic in their praise of Semdac Liquid Gloss. Its universal application brings economy and cuts down costs. While ordinary materials SCOUR the surface, Semdac PRESERVES it.

Sold in containers for all requirements: barrels, half barrels, five gallon, gallon, half gallon, quart and pint cans.

STANDARD OIL COMPANY

(Indiana)

910 S. Michigan Avenue Chicago, Ill.

1906

SEMDAC

LIQUID GLOSS ... FURNITURE DRESSING

STANDARD OIL COMPANY (Indiana)
910 South Michigan Avenue, Chicago

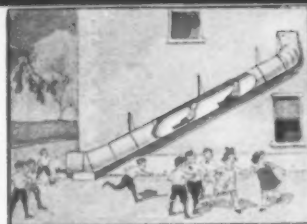
I am interested in receiving

- ☐ Copy of Semdac Liquid Gloss Booklet.
☐ Prices of Semdac Liquid Gloss.

Name..... Address.....

City..... State.....

SAFEST FOR SCHOOLS



POTTER TUBULAR SLIDE FIRE ESCAPE

Over 2500 now in use

Fire drills, when using a central hallway and staircase, are always a danger, as the world's greatest school catastrophies have proved. A scream or a cry of FIRE can easily create a dreaded panic even during Fire Drill.

POTTER TUBULAR SLIDES

coast the pupils away from the center of the building to the outside air without the least danger from smoke, gases, fire, or panic.

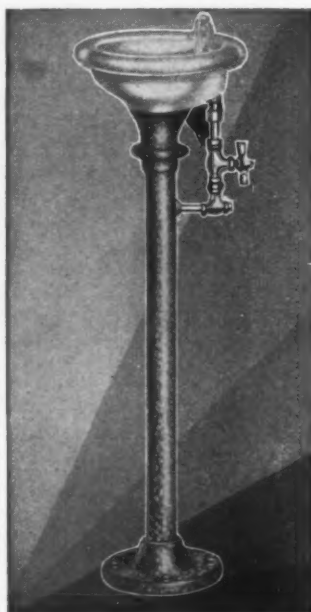
The Potter Tubular Slide Fire Escape has a service record and is approved by the Underwriters' Laboratories.

Write for details, specifications and list of schools using Potter safety methods

Potter Manufacturing Corp.

1861 Conway Bldg. - Chicago

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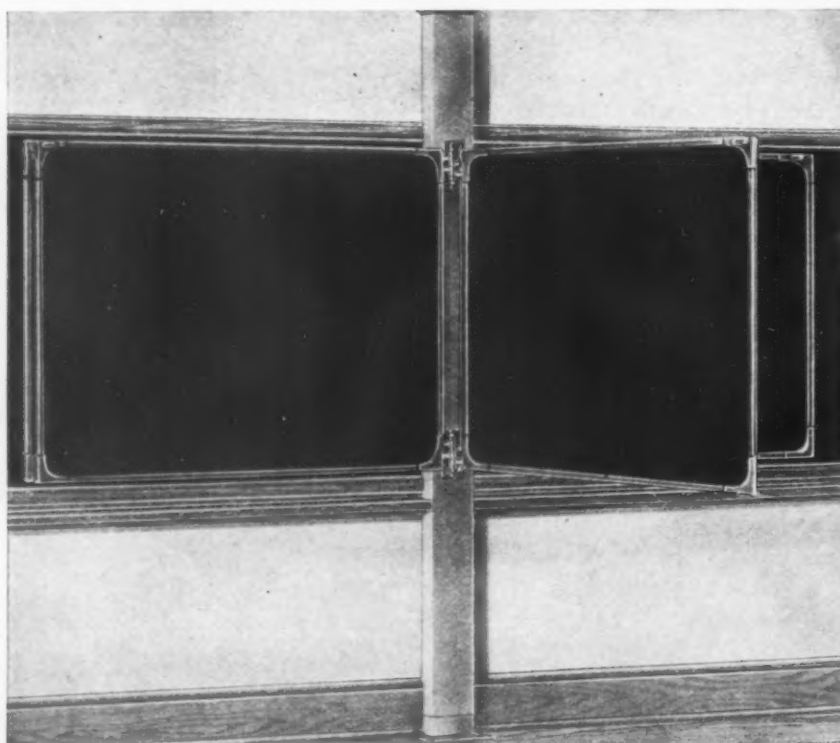
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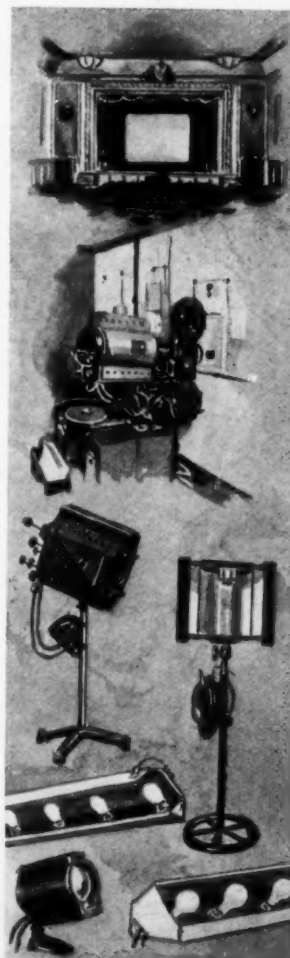
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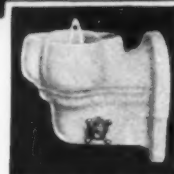
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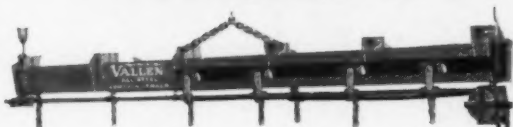
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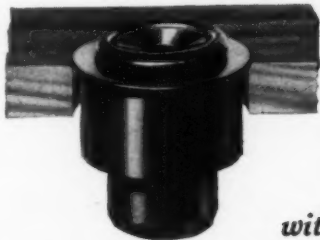
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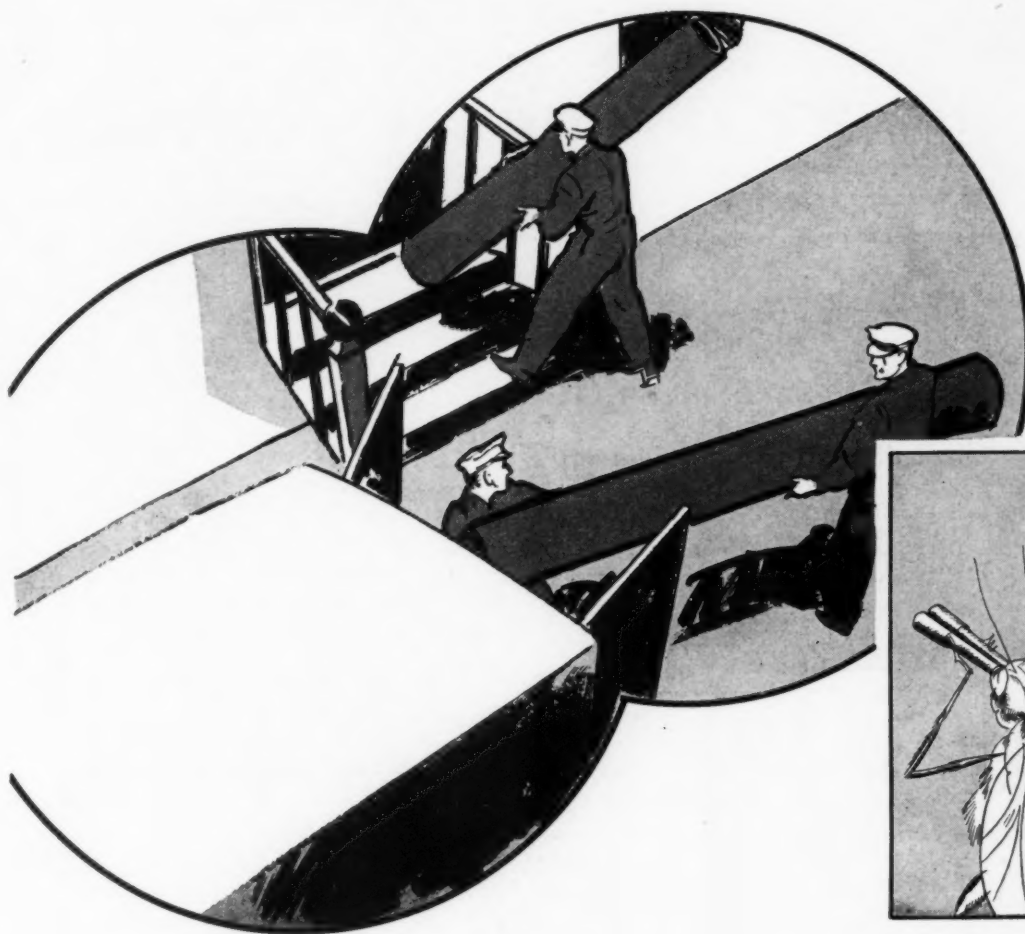
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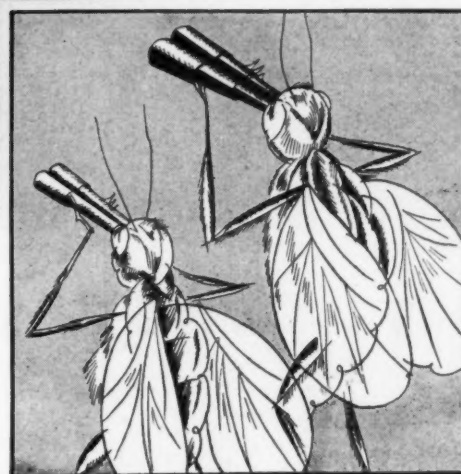
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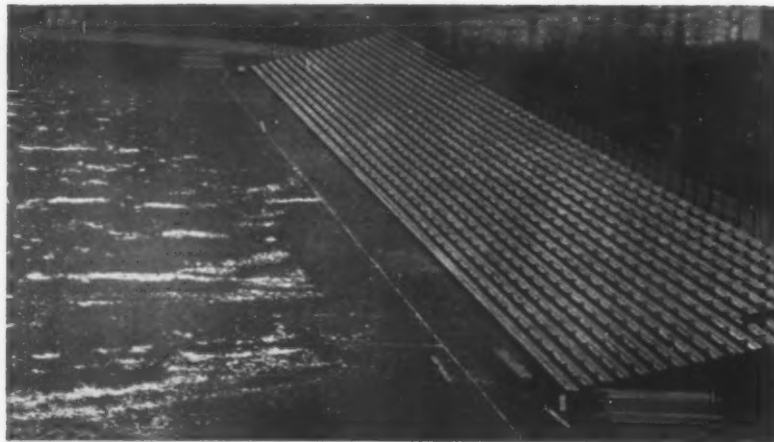
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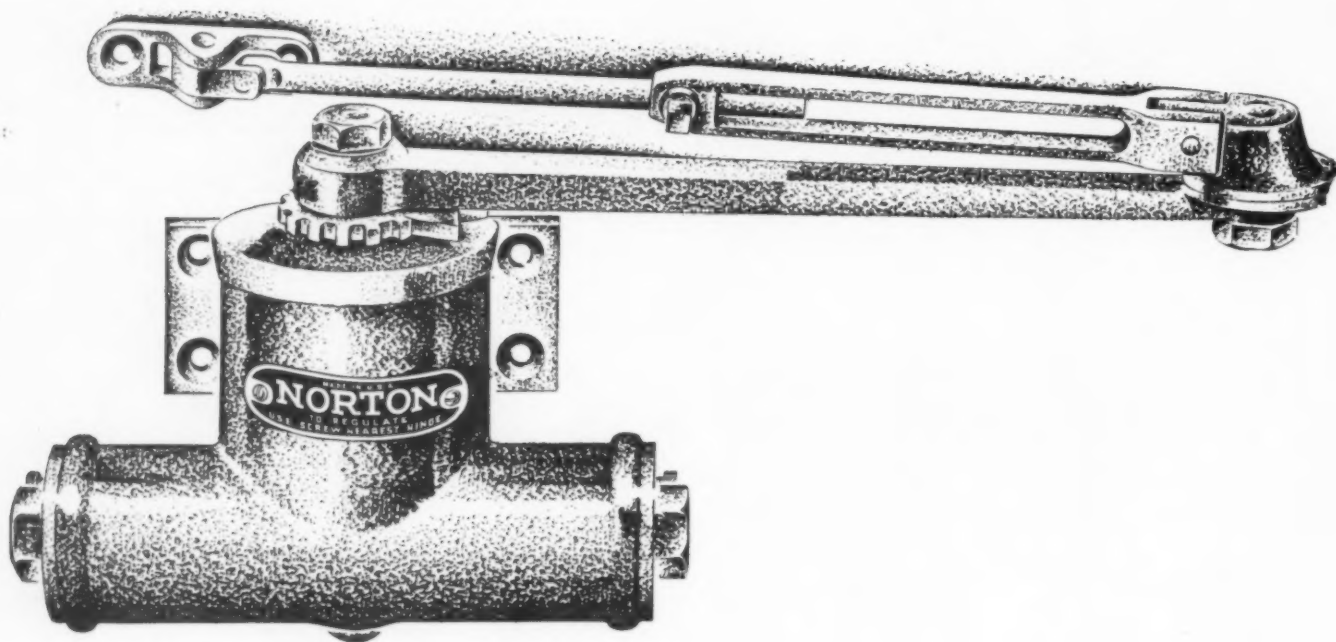
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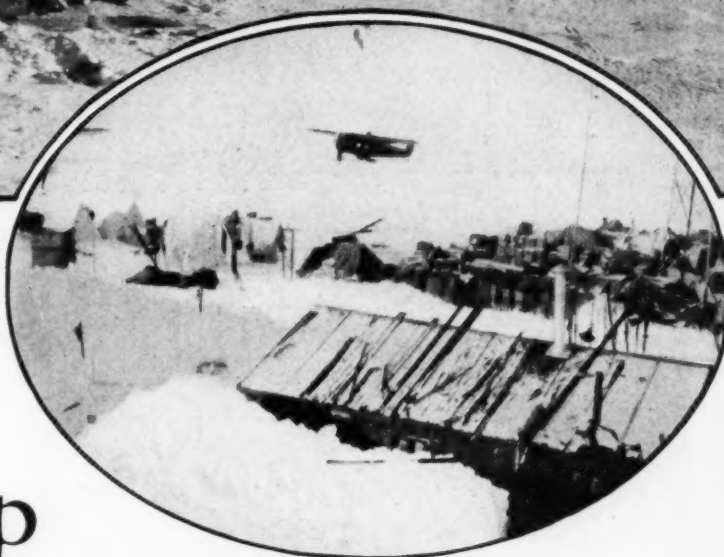
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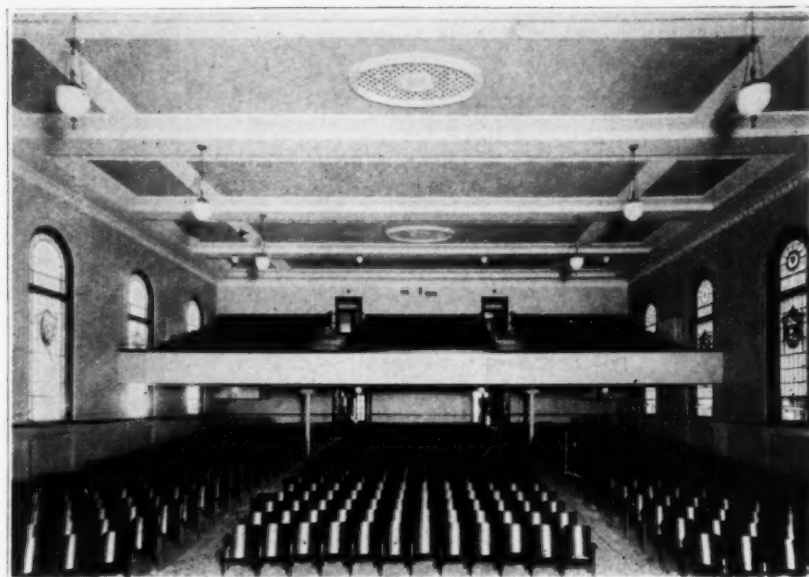
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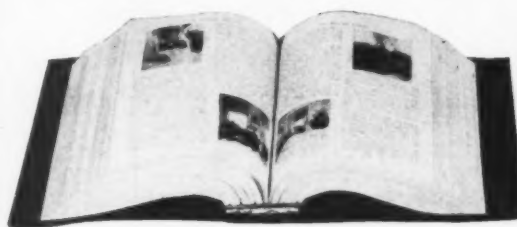
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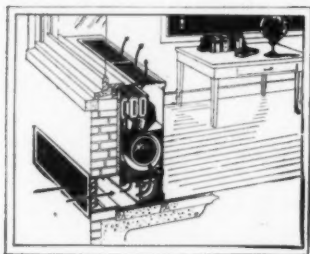
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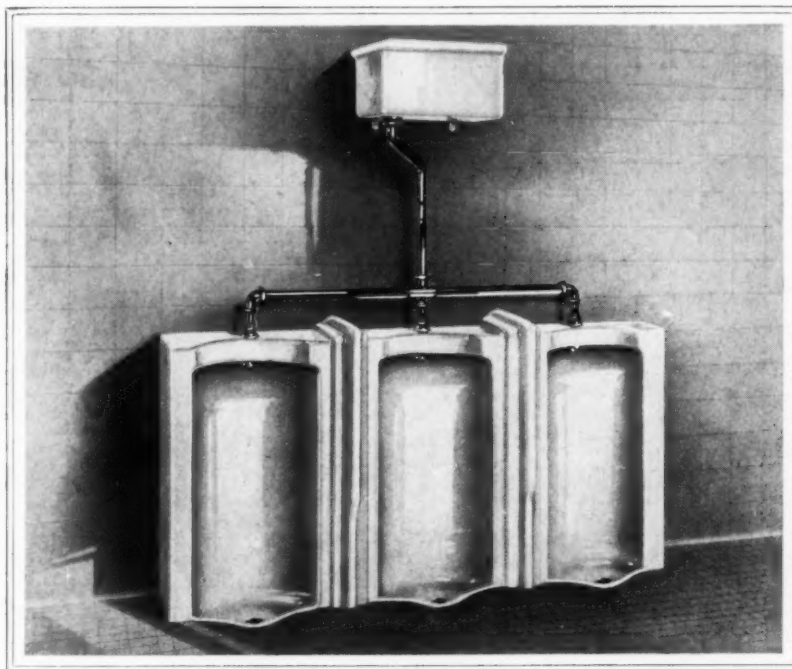
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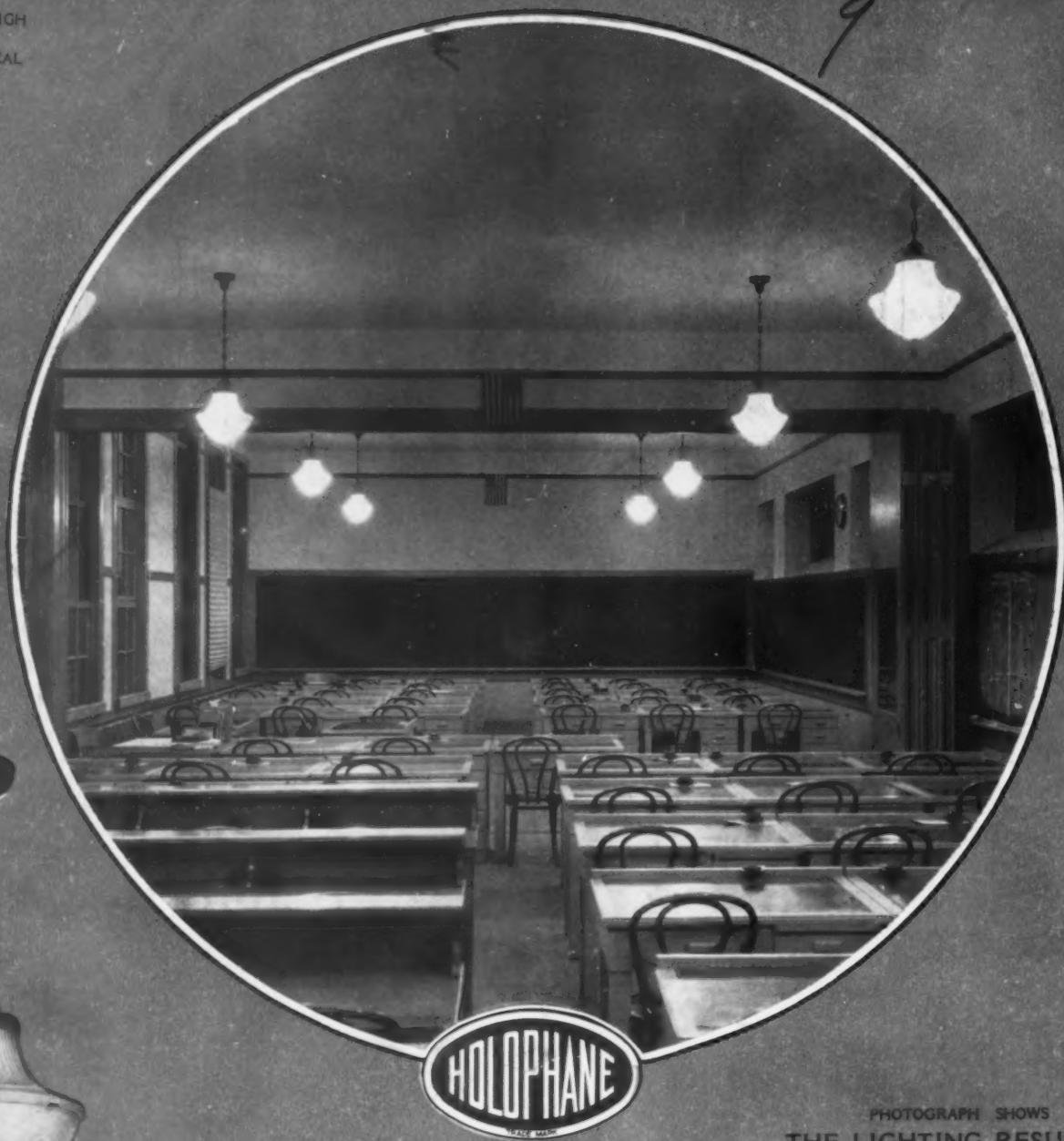
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